EXHIBIT 12

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Applications of U.S. Patent No. 8,943,500 to V-Migrate and V-Maestro (collectively, "Accused Products")

Plaintiff VirtaMove Corp. ("VirtaMove") infringes claims 1–20 of the '500 Patent (the "Asserted Claims") under 35 U.S.C. § 271(a), (b), and (c). As set forth below, VirtaMove's infringement is both direct and indirect.[1]

VirtaMove has directly infringed the '500 Patent at least by making, using, offering to sell, selling, and/or importing into the United States its V-Migrate and V-Maestro (collectively, "Accused Products") on or after the issuance date of the Patent.

VirtaMove induces infringement under 35 U.S.C. § 271(b) by providing the Accused Products, which are sold and specifically configured to infringe the Asserted Claims, to VirtaMove customers and partners in the United States. VirtaMove actively instructs and encourages its customers and partners on how to use the Accused Products, including through product manuals, advertising, and instructional videos. When used as instructed, VirtaMove's customers and partners use these products to practice the systems of the '500 Patent and directly infringe the Asserted Claims. On information and belief, VirtaMove specifically intends that its actions will result in infringement of the asserted claims of the '500 Patent or subjectively believes that its actions will result in infringement of the Asserted Claims, but took deliberate actions to avoid learning of the facts.

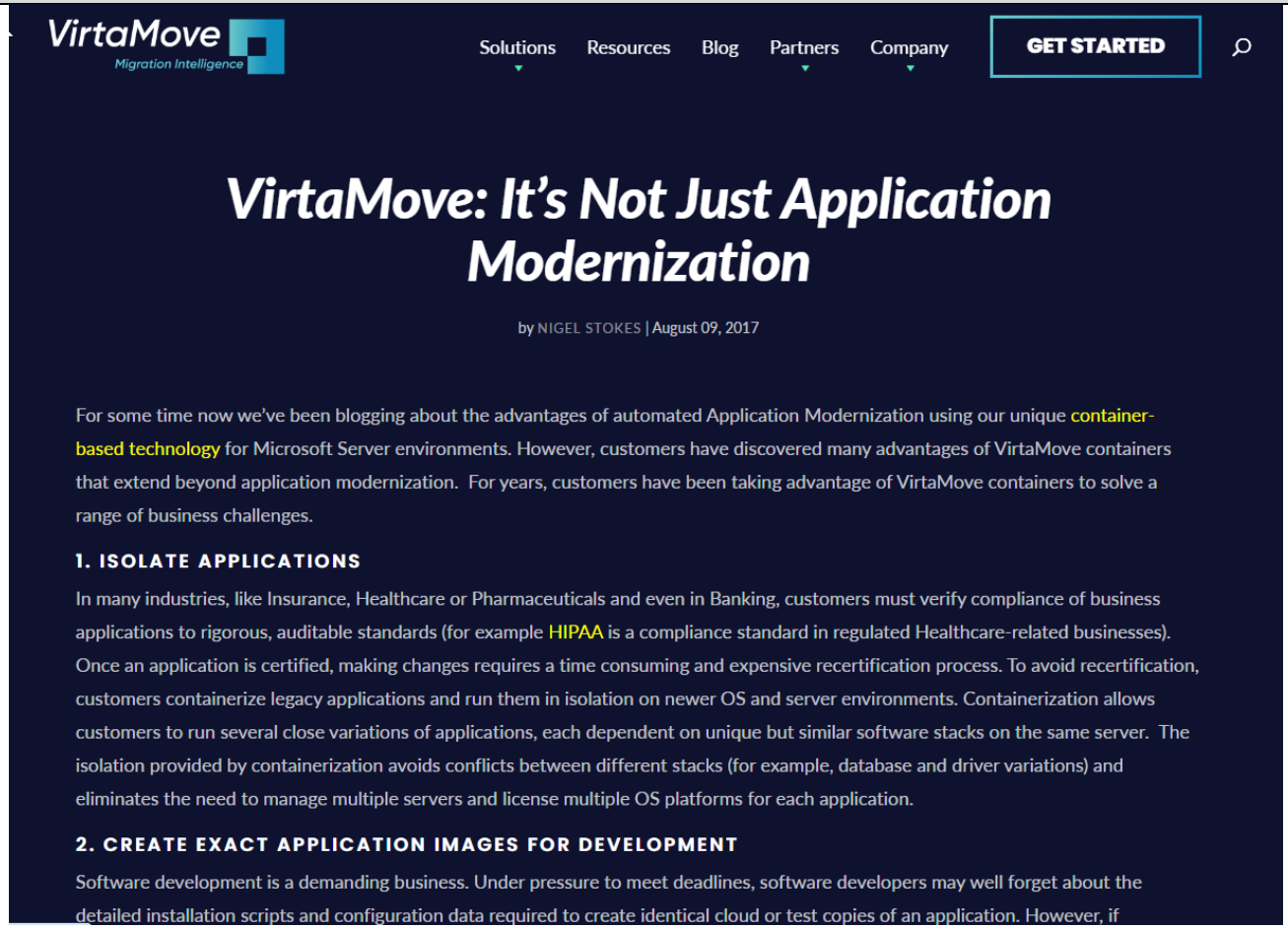
As shown below, VirtaMove also contributes to infringement under 35 U.S.C. § 271(c) by providing the Accused Products, which embodies a material part of the claimed invention of the '500 Patent, is known by VirtaMove to be specially made or adapted for use in an infringing manner, and is not with substantial non-infringing uses.

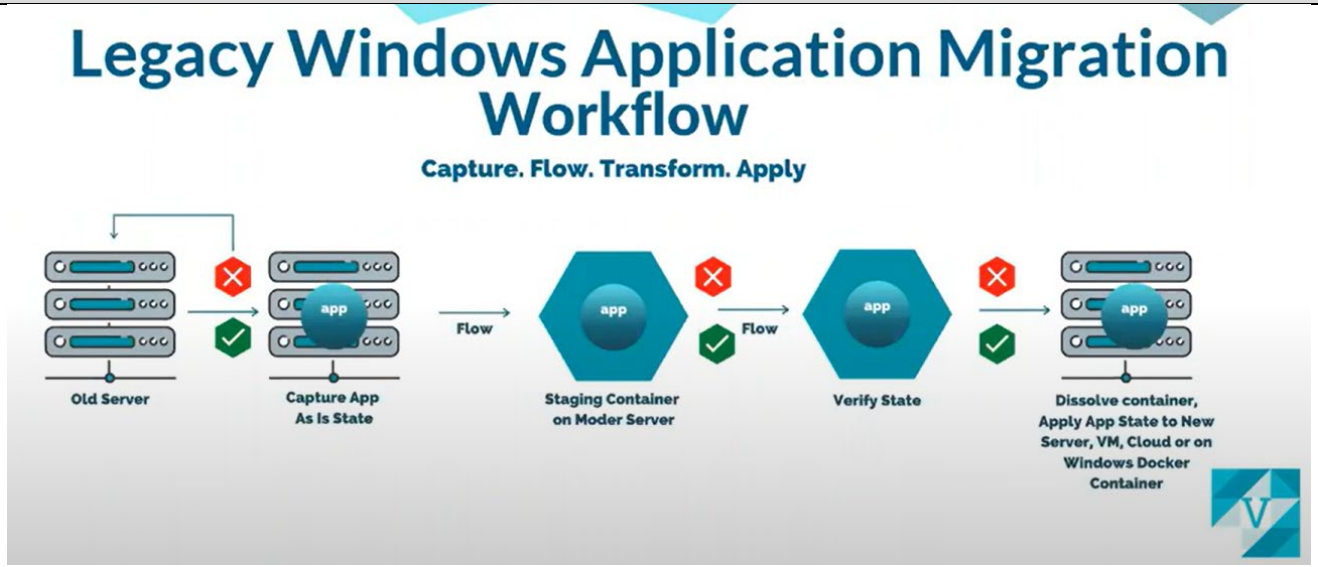
The Accused Products are specially designed to infringe the '500 Patent and the accused components have no substantial non-infringing uses.

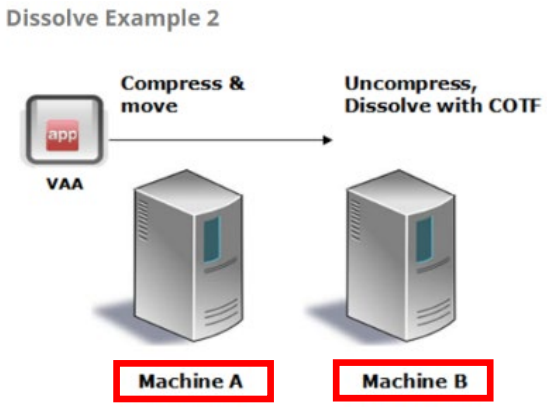
Claim	US 8,943,500 Claim Term	Analysis
1pre	A system, comprising:	To the extent that the preamble is limiting, the Accused Products comprise "[a] system" for updating isolated environments (containers) as applications request new resources.

[1] Public information is limited regarding the Accused Products, and accordingly, IBM reserves the right to amend its infringement contentions based on productions and source code made available during discovery.

Claim	US 8,943,500 Claim Term	Analysis
		For example, V-Migrate automates migration and "move[s] the application via smart, encrypted communication to a virtual container on the target system. The container encapsulates the virtualized application and its dependencies and separates it from the underlying OS." (https://virtamove.com/blog/gain-migration-intelligence/) Additional evidence showing VirtaMove's infringement is found in at least the following documents:

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/blog/not-just-app-modernization/)

Claim	US 8,943,500 Claim Term	Analysis
		 (https://www.youtube.com/watch?v=hDb541Ax6xw)
1a	one or more central processing units; and	The Accused Products comprise "one or more central processing units." For example, the Accused Products migrate applications "from the source machine to the destination machine[,]" where the source and destination machines comprise "central processing units" ("CPUs"). **Step 2: Move the Container** You must compress a container (.cap) to move it from the source machine to the destination machine. Then, you must uncompress the .cap file on the destination machine to begin using the container. One of the reasons for compressing the container is to preserve the short file names of the files in the container as they exist on the source machine. See Moving Containers.

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/313688121/Running+Containers#Step-2:-Move-the-Container)  (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311460124/About+Dissolve)

<table>
<tr><th>Claim</th><th>US 8,943,500
Claim Term</th><th>Analysis</th></tr>
<tr><td></td><td></td><td>
The following table lists the elements in the Source Details window.
<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>System Information card</td><td>Displays information about the system of the source:
IP Address
OS
Any group assigned to the source
CPU
Destination. You can assign a destination by clicking Assign.
Memory</td></tr>
</table>
(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314671475/Viewing+Source+Details)

The following table lists the elements in the Destination Details window.
<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>Destination System Information card</td><td>Displays information about the system of the destination:
IP Address
OS
Any group assigned to the source
CPU
Source. You can assign a destination to a source by clicking Assign.
Memory</td></tr>
</table>
</td></tr>
</table>

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314868022/Viewing+Destination+Details)
1b	one or more isolated environments including one or more applications and executables;	The Accused Products comprise "one or more isolated environments including one or more applications and executables." For example, the Accused Products "isolate applications."

Claim	US 8,943,500 Claim Term	Analysis

VirtaMove: It's Not Just Application Modernization

by NIGEL STOKES | August 09, 2017

For some time now we've been blogging about the advantages of automated Application Modernization using our unique container-based technology for Microsoft Server environments. However, customers have discovered many advantages of VirtaMove containers that extend beyond application modernization. For years, customers have been taking advantage of VirtaMove containers to solve a range of business challenges.

1. ISOLATE APPLICATIONS

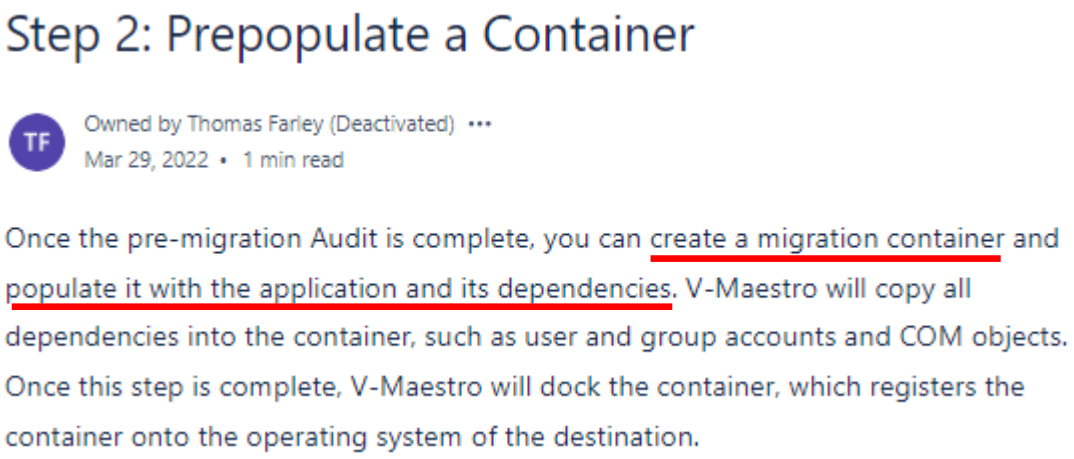
In many industries, like Insurance, Healthcare or Pharmaceuticals and even in Banking, customers must verify compliance of business applications to rigorous, auditable standards (for example HIPAA is a compliance standard in regulated Healthcare-related businesses). Once an application is certified, making changes requires a time consuming and expensive recertification process. To avoid recertification, customers containerize legacy applications and run them in isolation on newer OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by containerization avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application.

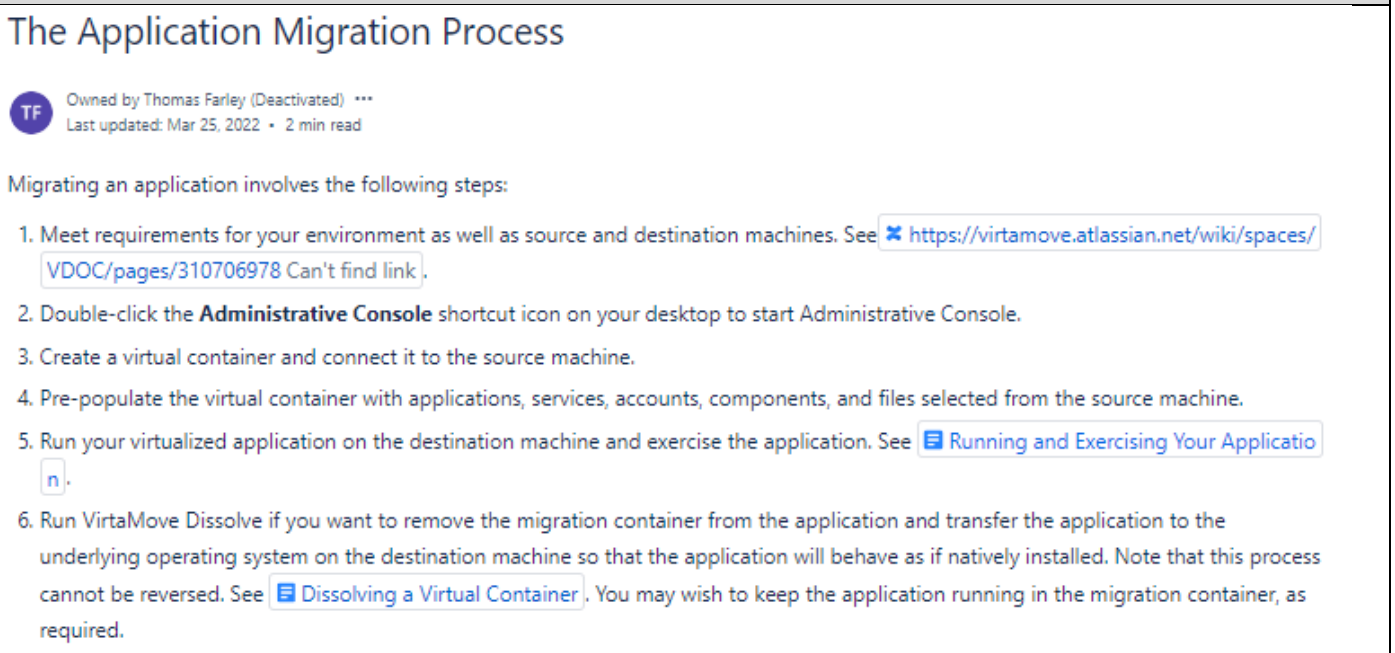
2. CREATE EXACT APPLICATION IMAGES FOR DEVELOPMENT

Software development is a demanding business. Under pressure to meet deadlines, software developers may well forget about the detailed installation scripts and configuration data required to create identical cloud or test copies of an application. However, if applications are containerized, it's easy to create exact images on newer OSs such as Windows Server 2008 R2 or WS2012 or WS2016. This eliminates the need to worry about recreating an installation process or scripts. Additionally, applications that are containerized with VirtaMove on WS2008 can run seamlessly on WS2012 or WS2016.

Containerization accelerates the development and testing of new software by making it easy to create identical copies of the software on both datacentre and cloud servers. It lets the developer focus on building software that solves business problems rather than worrying about the details of configuration.

(https://virtamove.com/blog/not-just-app-modernization/)

Claim	US 8,943,500 Claim Term	Analysis
		Indeed, the Accused Products "create a migration container and populate it with the application and its dependencies."  (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314802710/Step+2+Prepopulate+a+Container) Further evidence demonstrating that VirtaMove's containers comprise applications and executables can be found below:

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310739347/The+Application+Migration+Process)

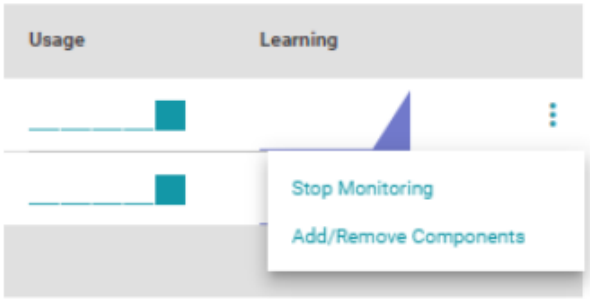
Adding Components to a Monitored Application

TF Owned by Thomas Farley (Deactivated) •••
Mar 29, 2022 • 1 min read

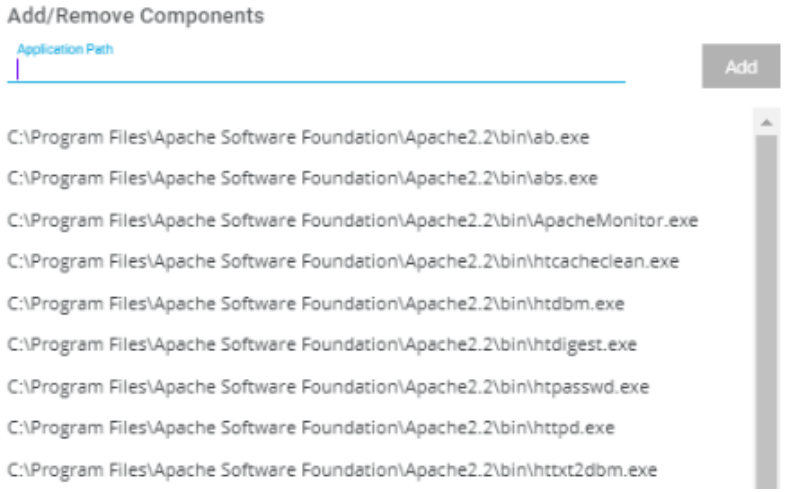
You can add a component to an application on a source machine if a required dependency is missing.

To Add a Component to a Monitored Application

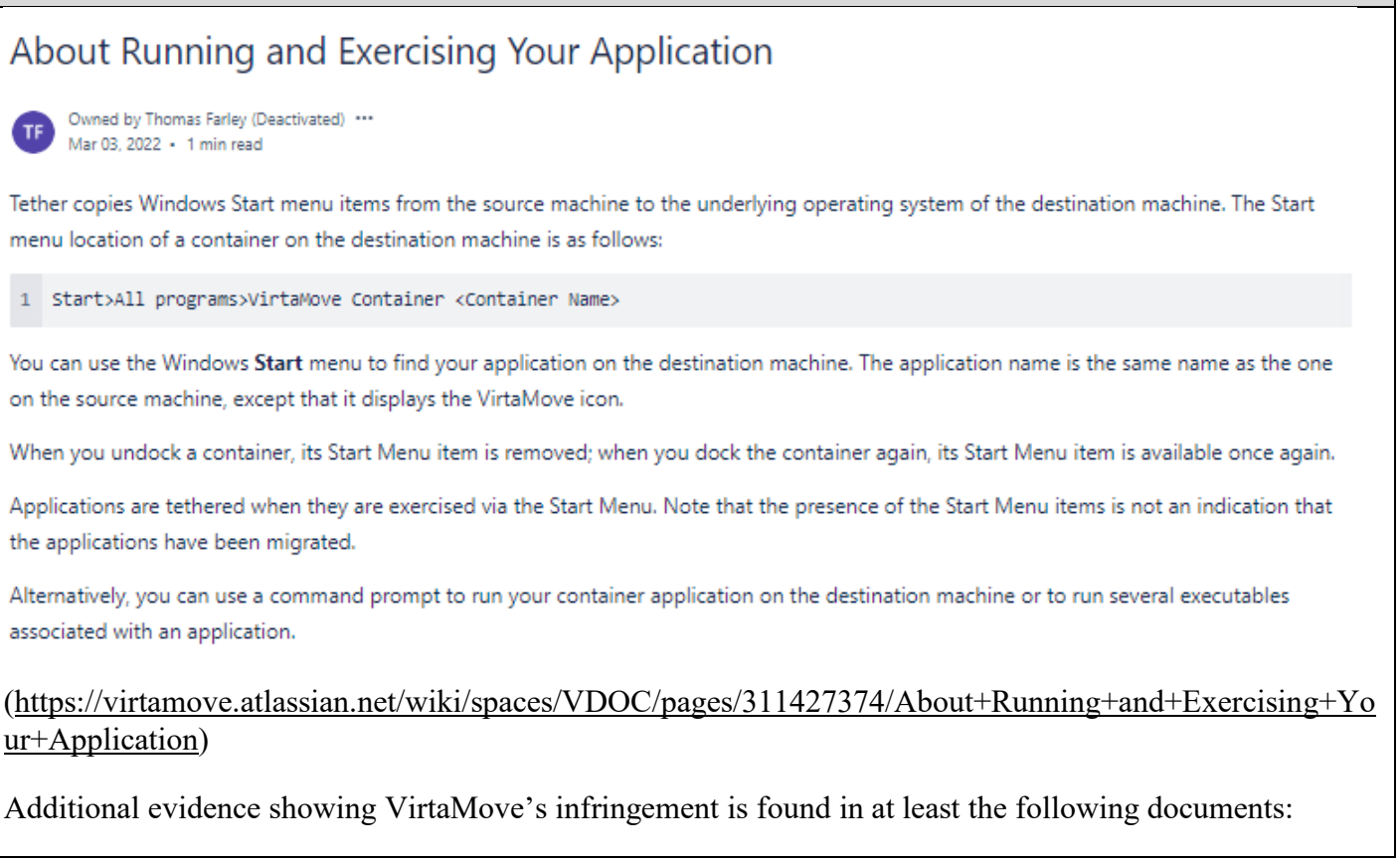
1. Click **Manage>Sources**. The Source Inventory windows displays.
2. Select an active source. The Source Details window displays.
3. Click the **Monitoring** icon in the Source Details window. The **Monitoring** view of the Source Details window displays a list of monitored applications for the selected source.
4. Select an application in the list and click More Actions, **Add/Remove Components**. The Add/Remove Components window opens.

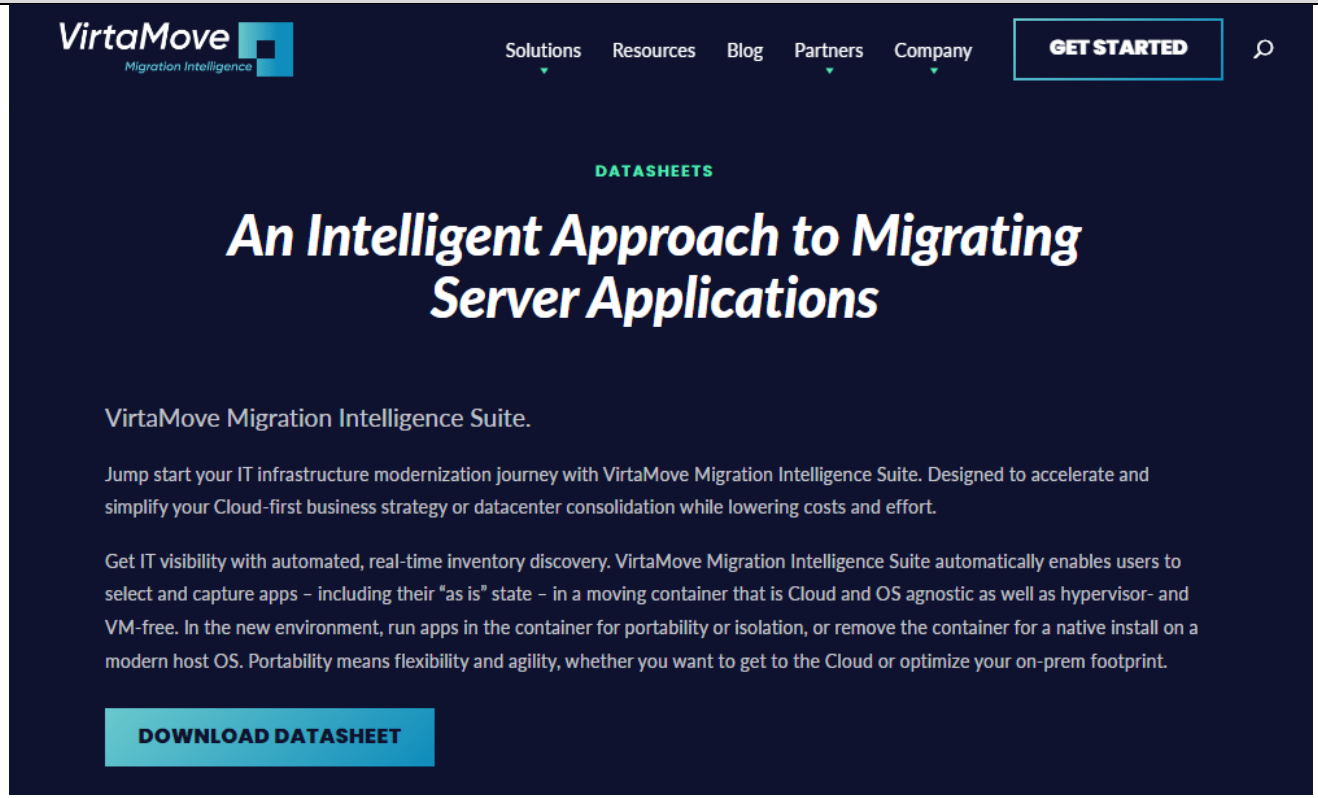


5. Enter the path of the component in the **Application Path** field.



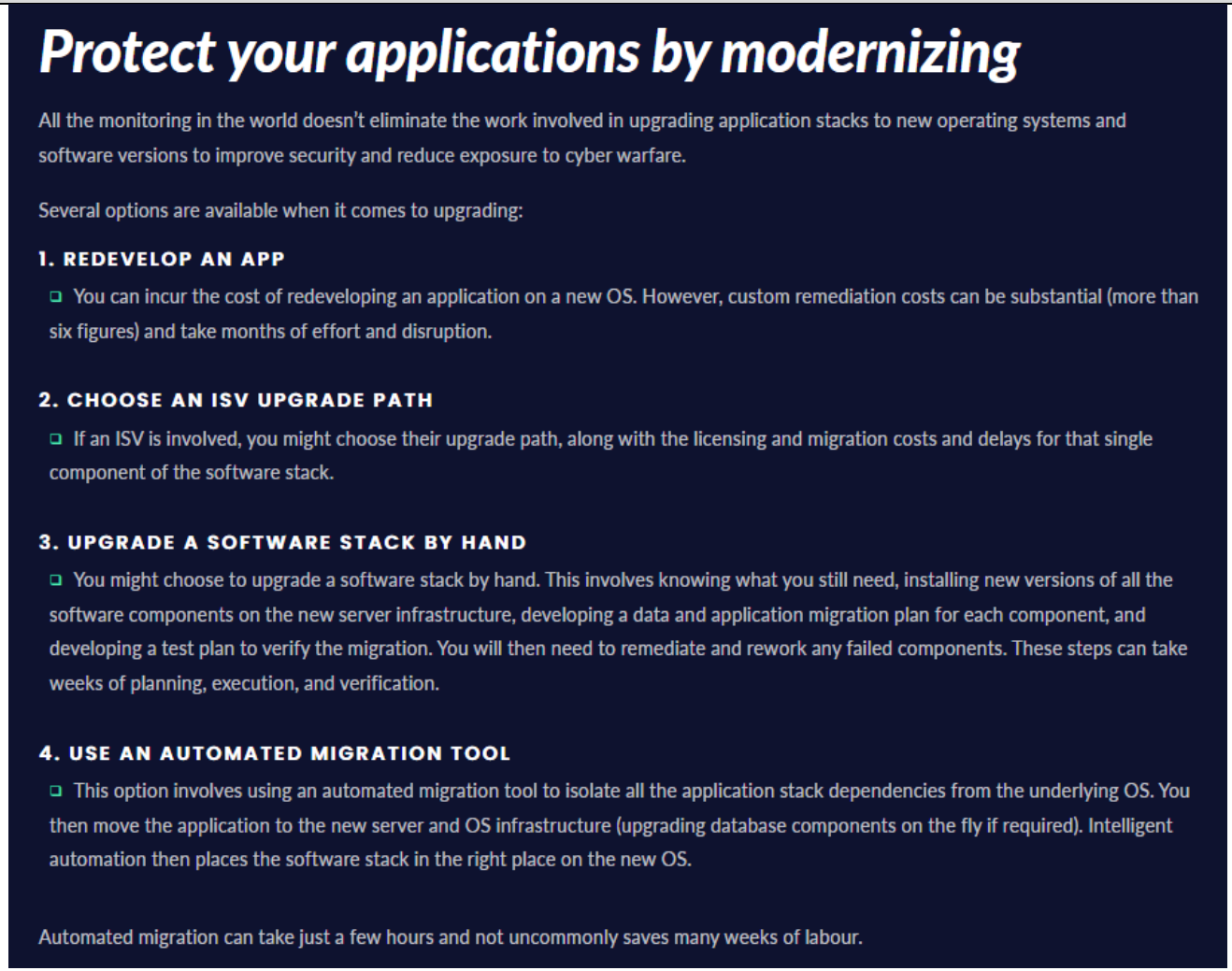
Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314933449/Adding+Components+to+a+Monitored+Application) virtadepends TF Owned by Thomas Farley (Deactivated) ••• Mar 24, 2022 • 1 min read This command lists the dependencies of an executable (for example, .exe, .dll). Administrator privileges are required. Syntax 1 virtadepends <option> [server username password] "path" Options Option: path — Description: The full path of the file or directory tree to process. Option: option — Description: /E - list export information; /I - list import information; /D - list delayed import information; /A - list all dependency tree information (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314016029/virtadepends)

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311427374/About+Running+and+Exercising+Your+Application) Additional evidence showing VirtaMove's infringement is found in at least the following documents:

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/resources/an-intelligent-approach-to-migrating-server-applications/)

Claim	US 8,943,500 Claim Term	Analysis
		3. CONTAINERIZE AND ISOLATE APPLICATIONS *The problem:* In regulated businesses, customers need to modernize certified applications that are running on legacy operating systems so that they can enable these apps on a supported OS. In many industries, like Insurance, Healthcare, Pharmaceuticals, and Banking, customers must verify compliance of business applications to rigorous, auditable standards (HIPAA and HITECH, for example, are compliance standards in regulated Healthcare-related businesses). Once an application is certified, making changes requires a time consuming and expensive re-certification process. *The VirtaMove solution:* Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. (https://virtamove.com/blog/q-and-a/)

Claim	US 8,943,500 Claim Term	Analysis



Protect your applications by modernizing

All the monitoring in the world doesn't eliminate the work involved in upgrading application stacks to new operating systems and software versions to improve security and reduce exposure to cyber warfare.

Several options are available when it comes to upgrading:

1. REDEVELOP AN APP

- You can incur the cost of redeveloping an application on a new OS. However, custom remediation costs can be substantial (more than six figures) and take months of effort and disruption.

2. CHOOSE AN ISV UPGRADE PATH

- If an ISV is involved, you might choose their upgrade path, along with the licensing and migration costs and delays for that single component of the software stack.

3. UPGRADE A SOFTWARE STACK BY HAND

- You might choose to upgrade a software stack by hand. This involves knowing what you still need, installing new versions of all the software components on the new server infrastructure, developing a data and application migration plan for each component, and developing a test plan to verify the migration. You will then need to remediate and rework any failed components. These steps can take weeks of planning, execution, and verification.

4. USE AN AUTOMATED MIGRATION TOOL

- This option involves using an automated migration tool to isolate all the application stack dependencies from the underlying OS. You then move the application to the new server and OS infrastructure (upgrading database components on the fly if required). Intelligent automation then places the software stack in the right place on the new OS.

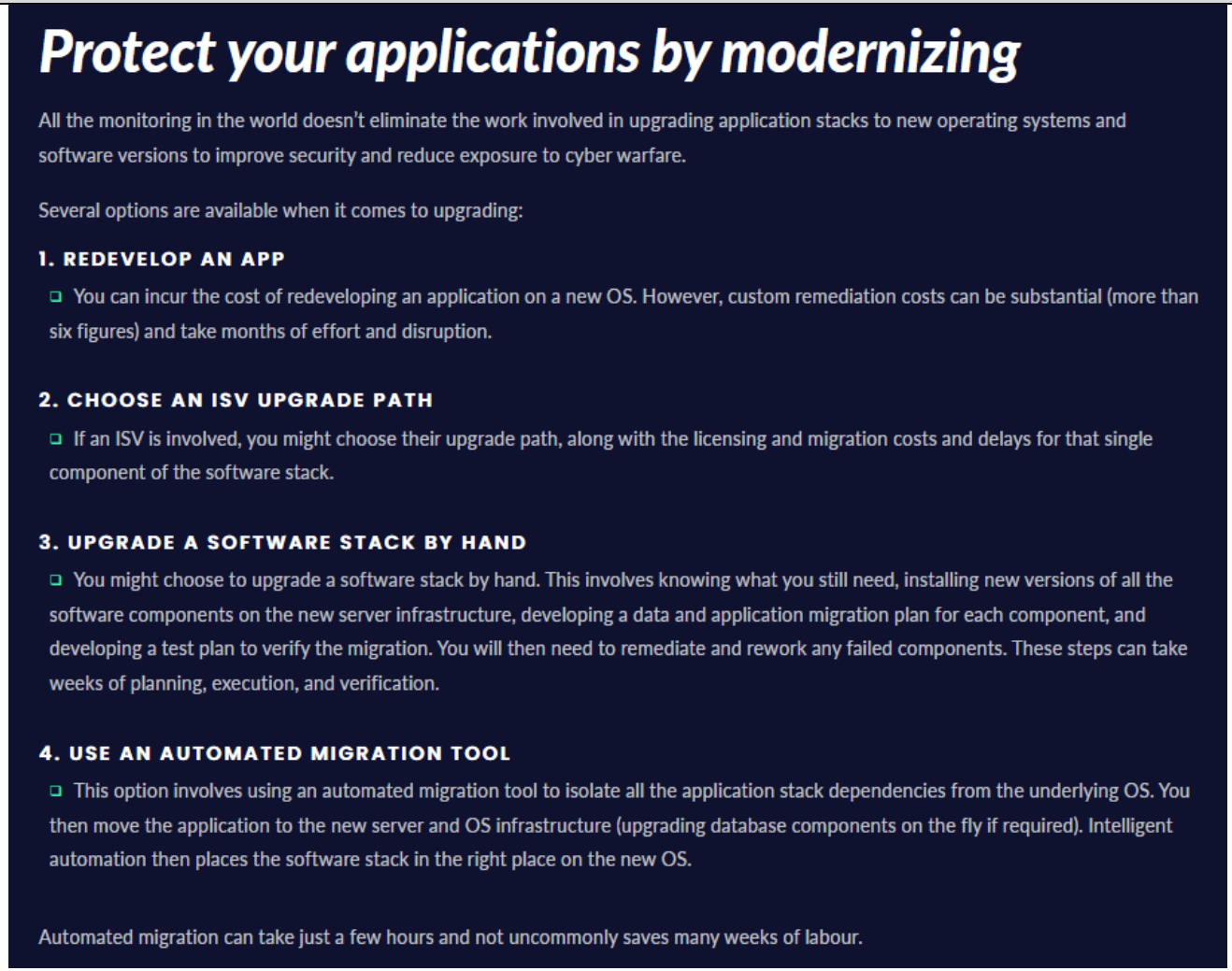
Automated migration can take just a few hours and not uncommonly saves many weeks of labour.

(https://virtamove.com/blog/cyber-warfare-again/)

Claim	US 8,943,500 Claim Term	Analysis
		The VirtaMove solution: Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. (https://virtamove.com/blog/q-and-a/)
1c	wherein the one or more central processing units and the one or more isolated environments are configured to interact with each other;	The Accused Products comprise a system "wherein the one or more central processing units and the one or more isolated environments are configured to interact with each other." For example, using VirtaMove's automated migration tool "involves using an ***automated migration tool to isolate all the application stack dependencies from the underlying OS. You then move the application to the new server and OS infrastructure (upgrading database components on the fly if required)***. Intelligent automation then places the software stack in the right place on the new OS."[2] This migration tool inherently establishes a systematic and configured interaction between the central processing units and newly created isolated environments by isolating application dependencies, transferring them to a new infrastructure, and intelligently integrating the software stack within the new operating system, thereby necessitating and facilitating communication and operational synchronization between the CPUs and the applications within their isolated environments.

[2] All emphasis added unless otherwise noted.

Claim	US 8,943,500 Claim Term	Analysis



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Several options are available when it comes to upgrading:

1. REDEVELOP AN APP

- You can incur the cost of redeveloping an application on a new OS. However, custom remediation costs can be substantial (more than six figures) and take months of effort and disruption.

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- If an ISV is involved, you might choose their upgrade path, along with the licensing and migration costs and delays for that single component of the software stack.

3. UPGRADE A SOFTWARE STACK BY HAND

- You might choose to upgrade a software stack by hand. This involves knowing what you still need, installing new versions of all the software components on the new server infrastructure, developing a data and application migration plan for each component, and developing a test plan to verify the migration. You will then need to remediate and rework any failed components. These steps can take weeks of planning, execution, and verification.

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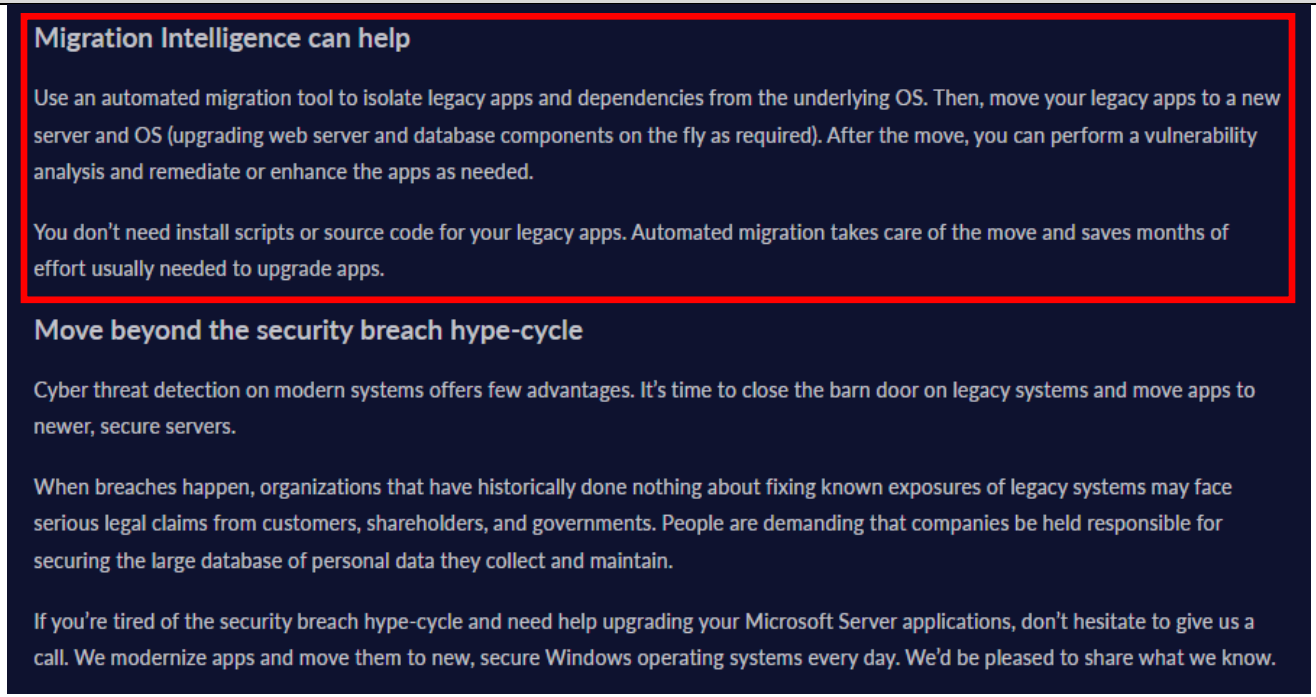
Automated migration can take just a few hours and not uncommonly saves many weeks of labour.

(https://virtamove.com/blog/cyber-warfare-again/)

Moreover, after isolating legacy apps and dependencies from the underlying OS and moving apps to a new environment, VirtaMove's Migration Intelligence allows users to "perform a ***vulnerability analysis and remediate or enhance the apps*** as needed." This process not only transfers the applications into newly-

Claim	US 8,943,500 Claim Term	Analysis
		created, isolated operational spaces but also involves subsequent steps that necessitate further CPU-environment interaction, particularly during the vulnerability analysis and remediation phases. These steps require the CPUs to process and execute tasks specific to the isolated environments, ensuring their security and functionality within the new system. (https://virtamove.com/blog/source-code-leaks-are-bad-for-business/)

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/blog/security-breach-hype-cycle/) VirtaMove's "[c]ontainerization allows customers to run several close variations of apps, each dependent on unique but similar software stacks on the same server," indicating interaction between the central processing unit and the isolated environments.

Claim	US 8,943,500 Claim Term	Analysis

Using VirtaMove to Solve Datacenter Management Problems

by VALERIE YATES | May 01, 2018

For years, customers have been taking advantage of VirtaMove containers to solve a range of business challenges in the datacenter management sphere.

1. ISOLATE APPLICATIONS

In industries like Insurance, Healthcare, Pharma, and Banking, customers must verify compliance to rigorous, auditable standards. Once an app is certified, making changes requires a time consuming and expensive recertification process. To avoid recertification, customers containerize legacy apps and run them in isolation on new OS and servers. Containerization allows customers to run several close variations of apps, each dependent on unique but similar software stacks on the same server.

2. CREATE EXACT APPLICATION IMAGES FOR DEVELOPMENT

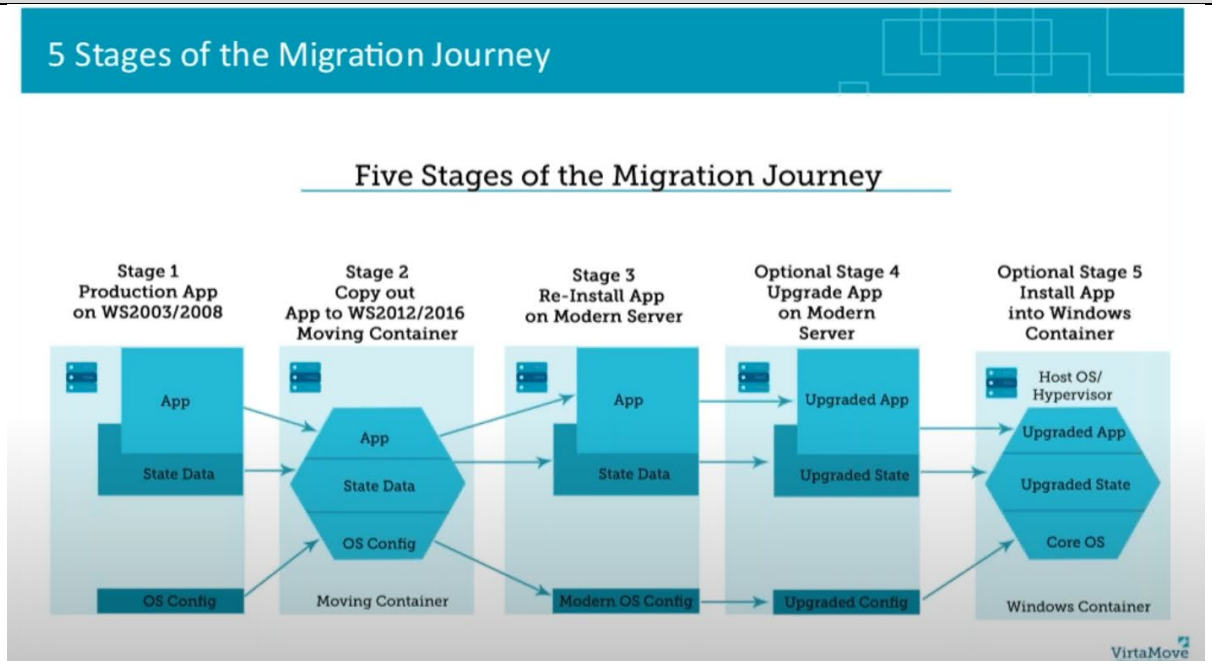
If apps are containerized, it's easy to create exact images on new OSs such as Windows Server WS2012, WS2016, or WS2019. This eliminates the need to worry about recreating an installation process. Containerization accelerates the development and testing of new software by making it easy to create identical copies of the software on both datacenter and cloud servers.

3. STORE MASTER COPIES OF APPLICATIONS FOR DISTRIBUTION

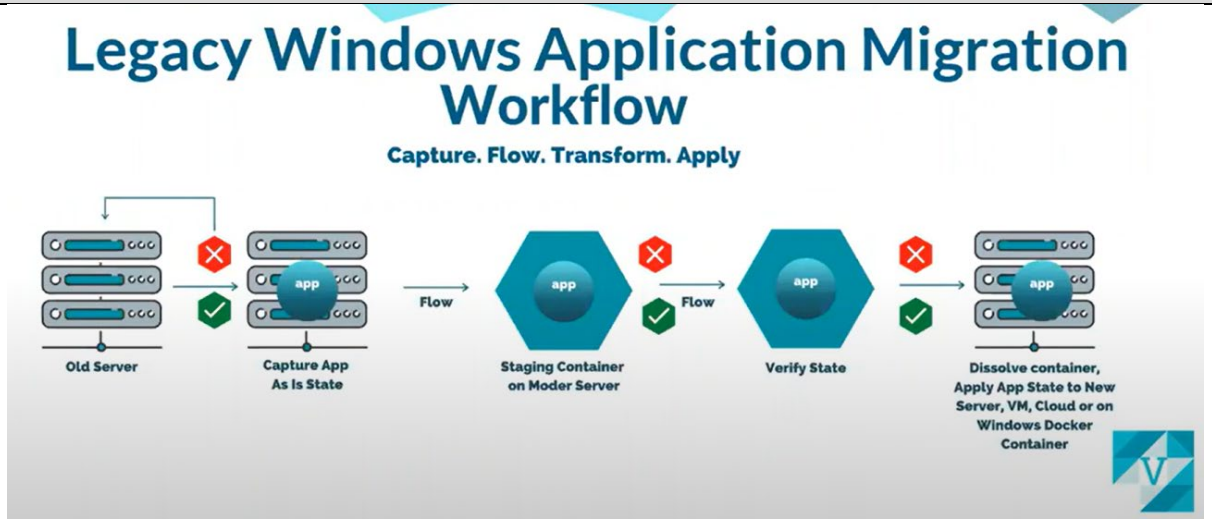
Once apps are containerized using VirtaMove, backup copies of the containerized apps can be stored for recovery, packaging, or distribution purposes. The master copy of an app stored in a container can be used to create a fresh, decluttered installation of an app, free of malware or other exposures.

(https://virtamove.com/blog/solve-datacenter-management-problems/)

To further illustrate the interaction between CPUs and isolated environments (i.e., containers):

Claim	US 8,943,500 Claim Term	Analysis
		 (https://www.youtube.com/watch?v=lhVF9-wgd2M&t=1639s)

Claim	US 8,943,500 Claim Term	Analysis



(https://www.youtube.com/watch?v=lhVF9-wgd2M&t=1639s)

About Migrating Applications

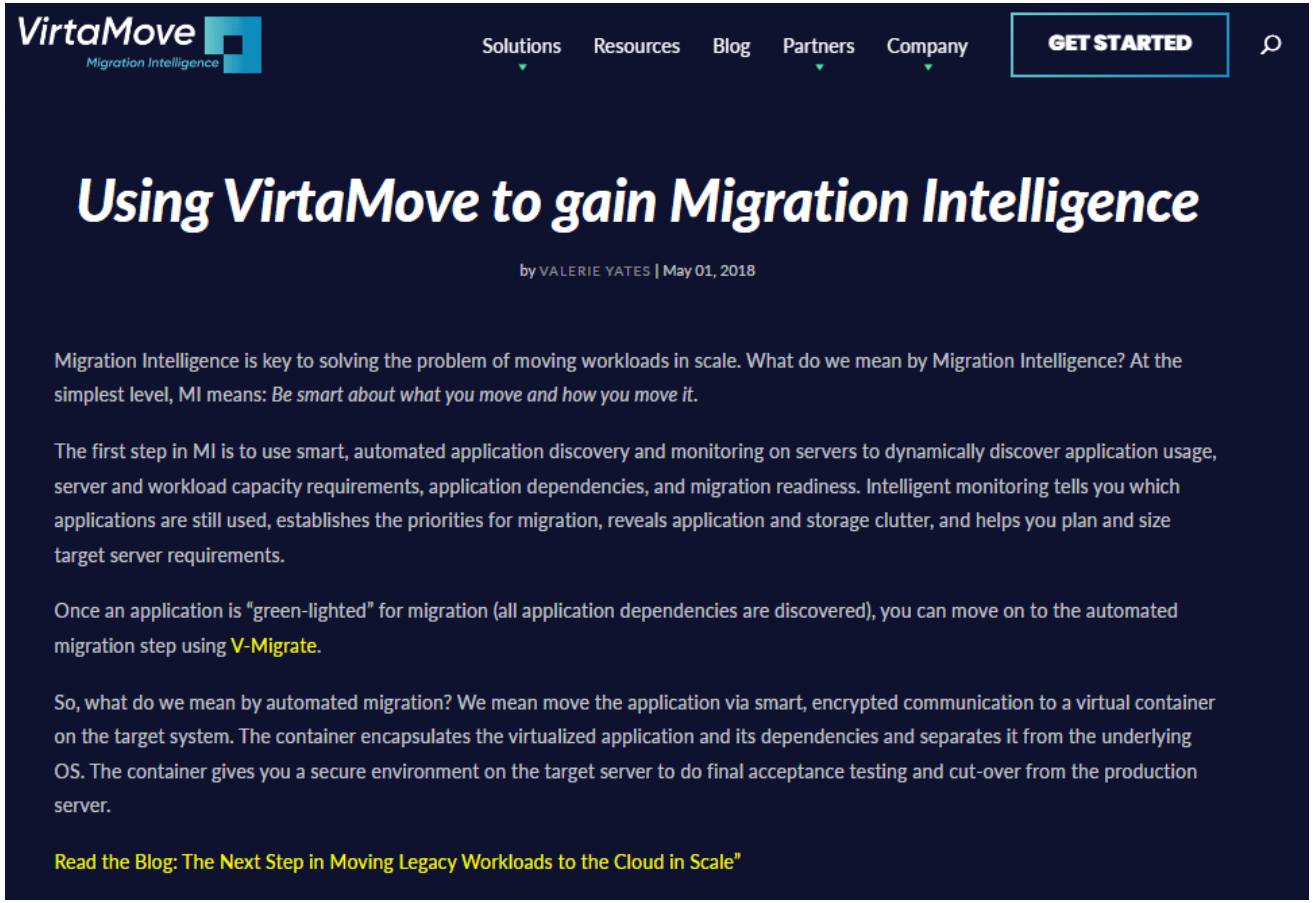
TF Owned by Thomas Farley (Deactivated) •••
Last updated: Mar 25, 2022 • 2 min read

VirtaMove Application Migration is an intelligent discovery tool that migrates an application and its dependencies from a tethered source machine to a destination machine. VirtaMove extracts existing enterprise applications and packages them into a container that can be provisioned and run natively on any operating system, machine, or cloud.

To migrate an application, VirtaMove is not required on the source machine. VirtaMove is required on the destination machine to tether to the application on the source machine and run the migrated virtual application appliance on the destination machine.

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310444457/About+Migrating+Applications?search_id=dec12687-24bb-428b-a12e-2ef9e928c184) Migrating an application involves the following steps: 1. Meet requirements for your environment as well as source and destination machines. See https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310706978 Can't find link. 2. Double-click the **Administrative Console** shortcut icon on your desktop to start Administrative Console. 3. Create a virtual container and connect it to the source machine. 4. Pre-populate the virtual container with applications, services, accounts, components, and files selected from the source machine. 5. Run your virtualized application on the destination machine and exercise the application. See Running and Exercising Your Application. 6. Run VirtaMove Dissolve if you want to remove the migration container from the application and transfer the application to the underlying operating system on the destination machine so that the application will behave as if natively installed. Note that this process cannot be reversed. See Dissolving a Virtual Container. You may wish to keep the application running in the migration container, as required. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310739347/The+Application+Migration+Process) Docking Docking a container integrates and prepares the container's environment as part of the underlying operating system so that the application is ready to run. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311296481/Docking+and+Undocking+Containers)

Claim	US 8,943,500 Claim Term	Analysis
		Additional evidence showing VirtaMove's infringement is found in at least the following documents:



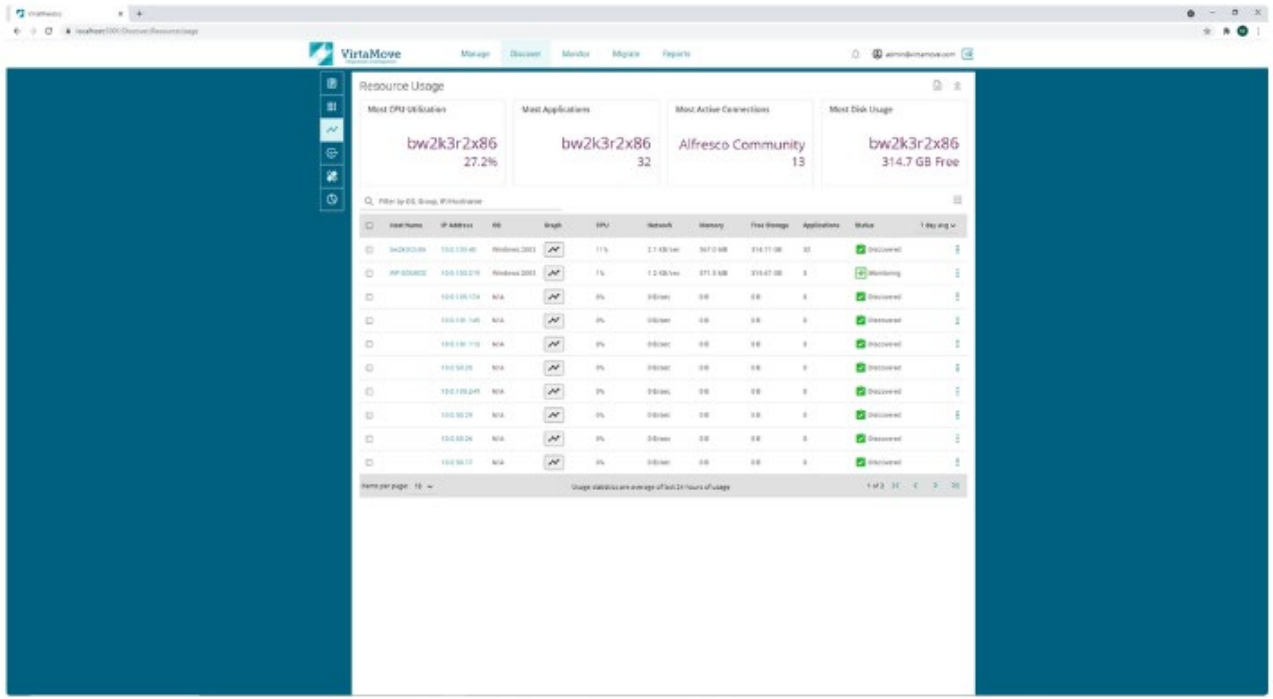
Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.com/blog/gain-migration-intelligence/

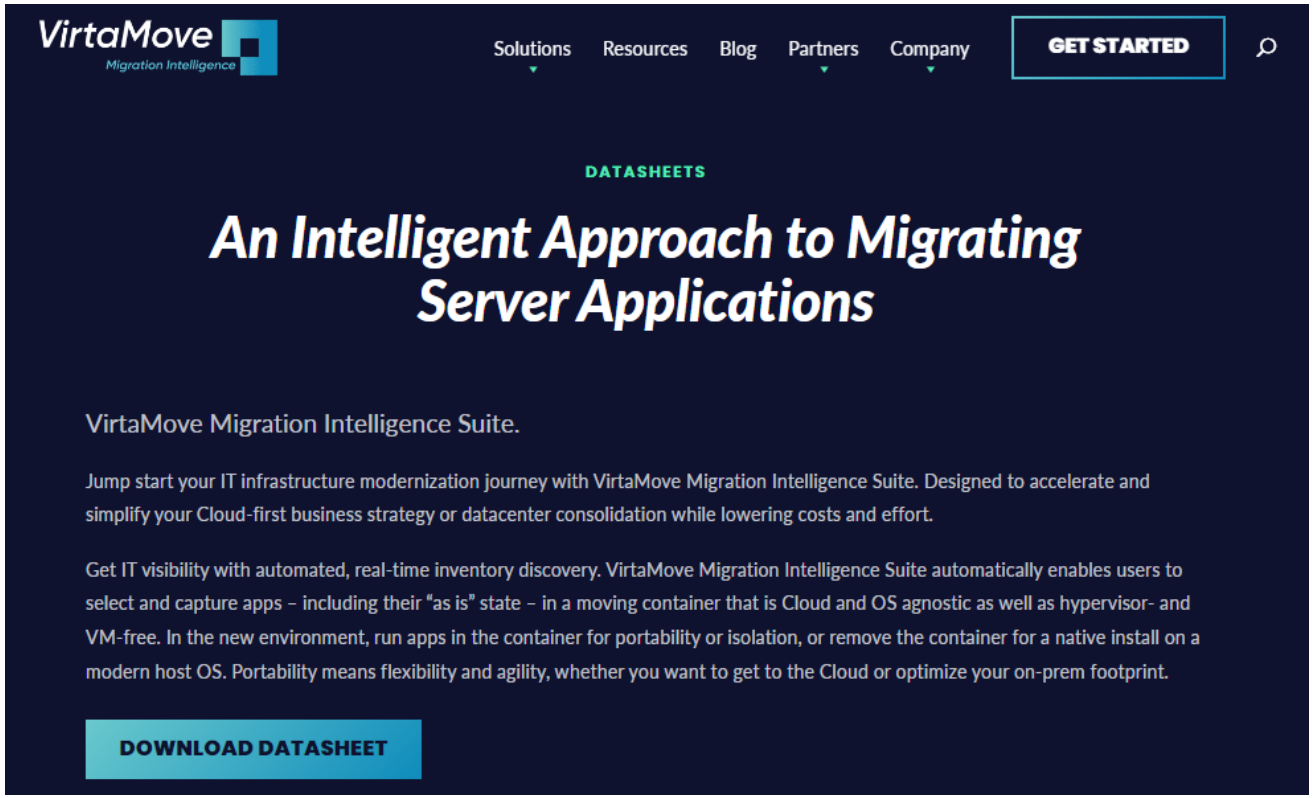
Discovering Resource Usage

TF Owned by Thomas Farley (Deactivated) •••
Last updated: Mar 30, 2022 • 2 min read

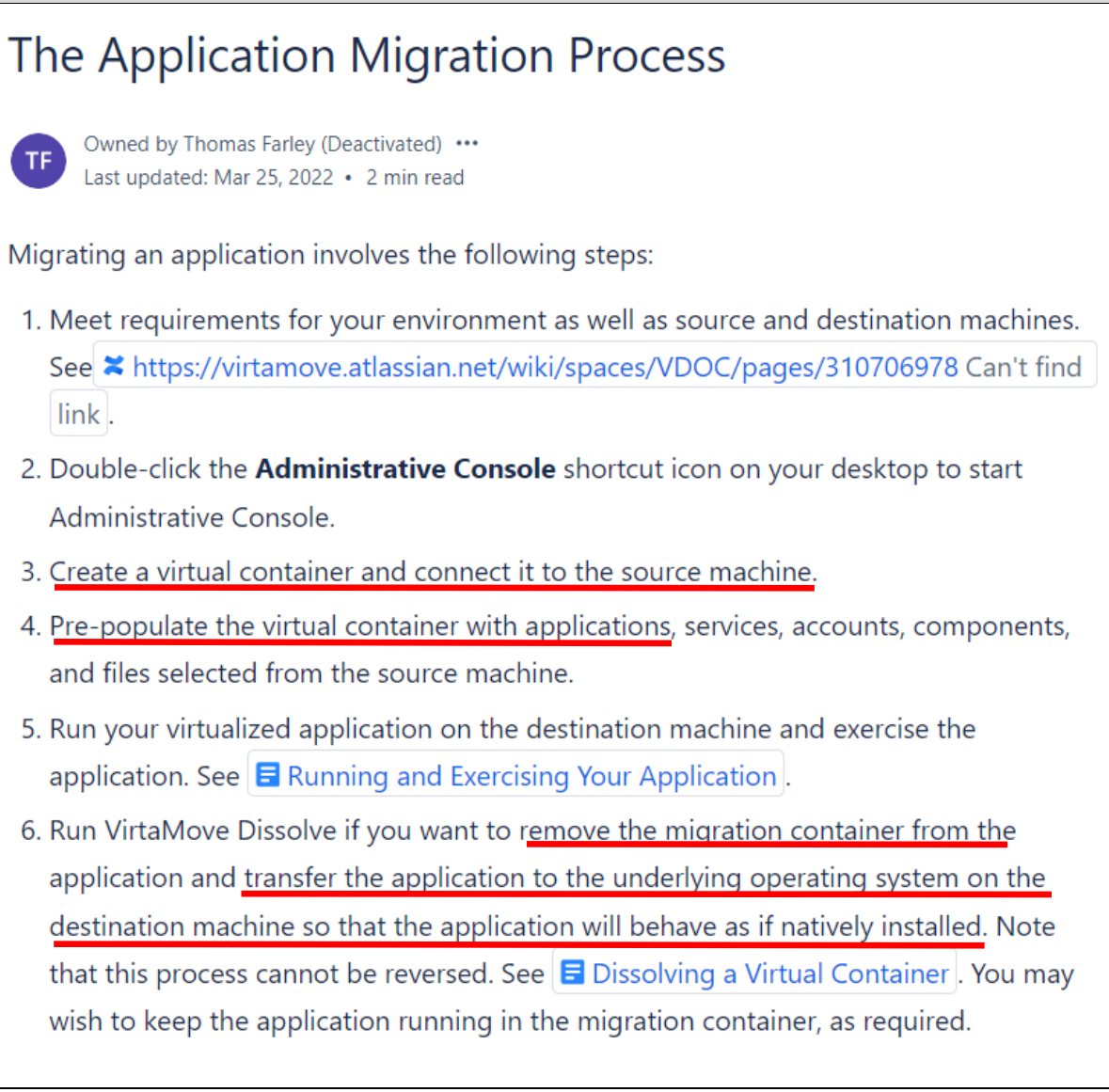
The Resource Usage window displays a summary of resource usage data for discovered sources.

Click **Discover>Resource Usage**. The Resource Usage page is displayed.



Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314605794/Discovering+Resource+Usage)
1d	wherein the one or more isolated environments are created during installation of the one or more applications, and	The Accused Products comprise a system "wherein the one or more isolated environments are created during installation of the one or more applications." For example, "[i]n the new environment, run apps in the container for portability or isolation," implying that the isolation is created during installation of the applications.  (https://virtamove.com/resources/an-intelligent-approach-to-migrating-server-applications/)

Claim	US 8,943,500 Claim Term	Analysis
		Indeed, installation of applications requires "[c]reat[ing] a virtual container" and "pre-populat[ing] the virtual container with applications," where such containers are isolated environments, as already indicated.

Claim	US 8,943,500 Claim Term	Analysis
		

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310739347/The+Application+Migration+Process) Additional evidence showing VirtaMove's infringement is found in at least the following documents:

Claim	US 8,943,500 Claim Term	Analysis

VirtaMove: It's Not Just Application Modernization

by NIGEL STOKES | August 09, 2017

For some time now we've been blogging about the advantages of automated Application Modernization using our unique container-based technology for Microsoft Server environments. However, customers have discovered many advantages of VirtaMove containers that extend beyond application modernization. For years, customers have been taking advantage of VirtaMove containers to solve a range of business challenges.

1. ISOLATE APPLICATIONS

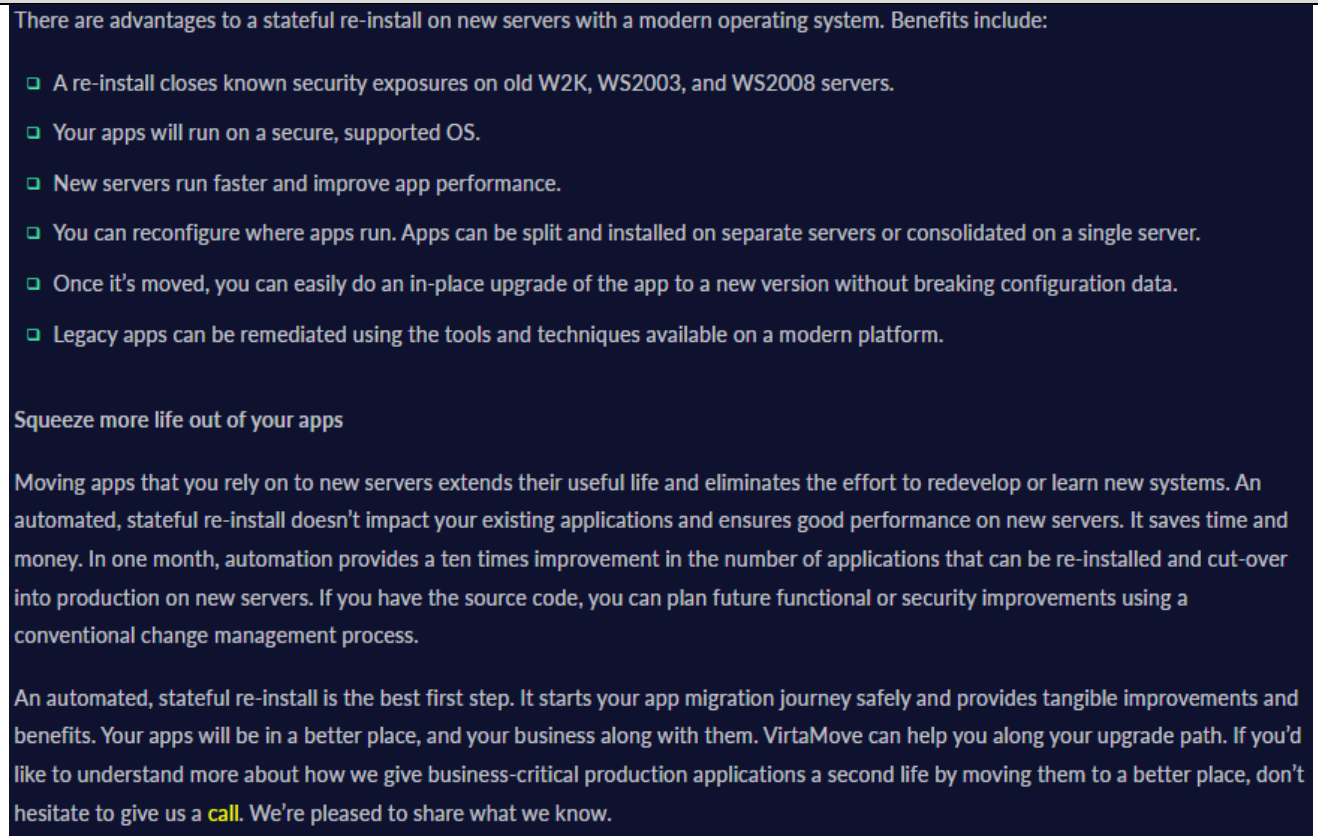
In many industries, like Insurance, Healthcare or Pharmaceuticals and even in Banking, customers must verify compliance of business applications to rigorous, auditable standards (for example HIPAA is a compliance standard in regulated Healthcare-related businesses). Once an application is certified, making changes requires a time consuming and expensive recertification process. To avoid recertification, customers containerize legacy applications and run them in isolation on newer OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by containerization avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application.

2. CREATE EXACT APPLICATION IMAGES FOR DEVELOPMENT

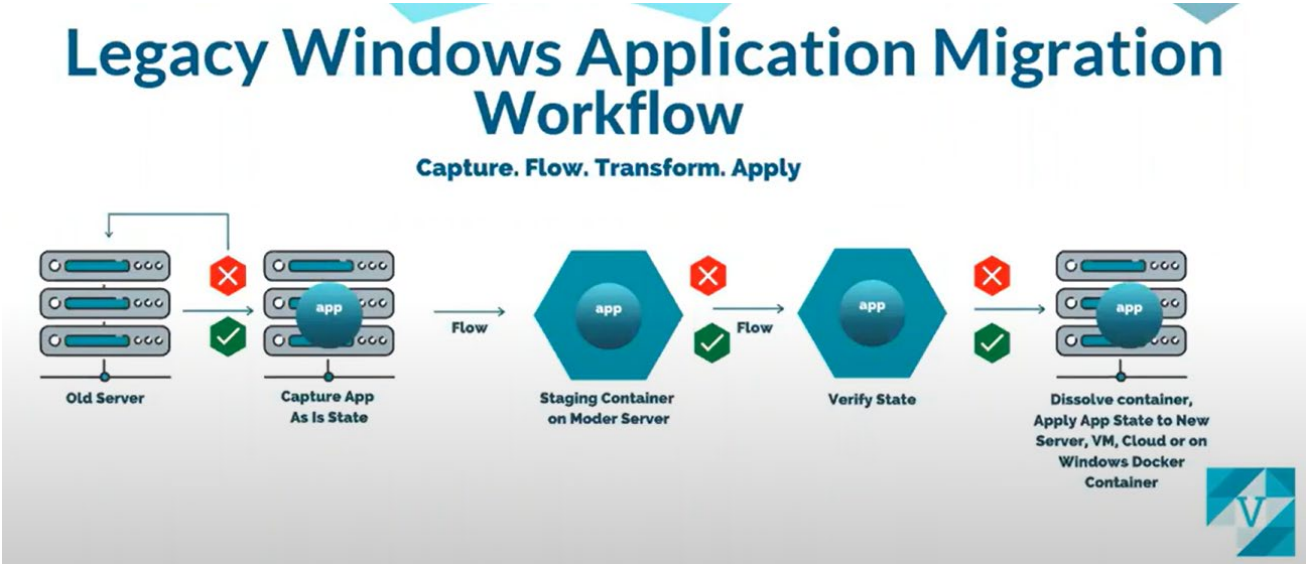
Software development is a demanding business. Under pressure to meet deadlines, software developers may well forget about the detailed installation scripts and configuration data required to create identical cloud or test copies of an application. However, if applications are containerized, it's easy to create exact images on newer OSs such as Windows Server 2008 R2 or WS2012 or WS2016. This eliminates the need to worry about recreating an installation process or scripts. Additionally, applications that are containerized with VirtaMove on WS2008 can run seamlessly on WS2012 or WS2016.

Containerization accelerates the development and testing of new software by making it easy to create identical copies of the software on both datacentre and cloud servers. It lets the developer focus on building software that solves business problems rather than worrying about the details of configuration.

(https://virtamove.com/blog/not-just-app-modernization/)

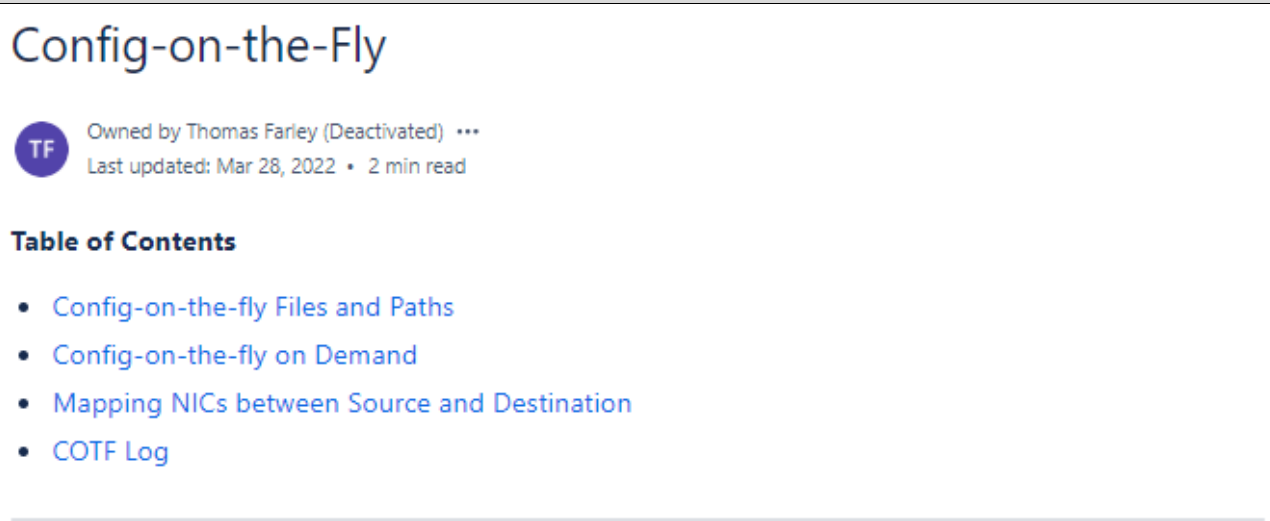
Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/blog/app-migration-journey/)
1e	updates to the one or more isolated environments occur as the one or more applications use additional resources;	The Accused Products comprise a system "[wherein] updates to the one or more isolated environments occur as the one or more applications use additional resources." For example, VirtaMove supports complex synchronization functionality and allows users to "***select an 'update' sync to make sure that the latest files are in the VirtaMove container. The latency in the resync process depends on the amount of new data being copied into the container***. You can view a Latency Report to understand available network bandwidth."

Claim	US 8,943,500 Claim Term	Analysis
		Here, VirtaMove's ***"update sync"*** feature directly facilitates the dynamic and necessary adaptation of the isolated environments—represented by the VirtaMove containers—to accommodate new or updated application resources. The capability to sync and thus update the container contents based on the latest files reflects an intrinsic mechanism where the isolated environments evolve in response to the application's changing resource demands. The inclusion of a Latency Report to monitor network bandwidth availability further supports this claim by ensuring that updates are not only timely but also informed by the current network conditions, optimizing the update process. **Step 6: Cut-Over** Once the application is verified and passes User Acceptance testing, you can plan a cut-over into production. At a high level, cut-over might look like this: the VirtaMove CAP file is used to complete a native install of the migrated application on the modern operating system. In addition, resyncing of all dynamic data and application components is required. If a relational database is part of the migration, it too needs to be resynced. At cut-over, the Cloud app becomes the new production system, so a sequester, quiet point, or cut-over window is required. Network performance might be a challenge during the available cut-over window. Let's talk about syncing the container on the Cloud. Some time has passed from initial containerization and completion of User Acceptance testing. How much time depends on how long it took to complete User Acceptance testing. To resynchronize, the latest version of data and files from the source Production environment is brought over to the Cloud. If there's a long delay between initial containerization and User Acceptance testing, resynchronization may need to be completed in the local network domain before transferring the resynced CAP file to the Cloud environment. The CAP file is then used to natively re-install the application on the new server. VirtaMove software supports complex synchronization functionality. You can select an "update" sync to make sure that the latest files are in the VirtaMove container. The latency in the resync process depends on the amount of new data being copied into the container. You can view a Latency Report to understand available network bandwidth. (https://virtamove.com/blog/cloud-onboarding-with-virtamove-7-steps-to-success/) The "update sync" feature is also referred to as "tether sync." "When you tether and then launch the application, ***if the application tries to open a folder and the folder does not exist on the underlying operating system of the destination machine, tether will copy that folder into the container.***"

Claim	US 8,943,500 Claim Term	Analysis
		Note: When you tether and then launch the application, if the application tries to open a folder and the folder does not exist on the underlying operating system of the destination machine, tether will copy that folder into the container. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311427374/About+Running+and+Exercising+Your+Application) VirtaMove application "tethering" or "staging and verifying" involves updating the container if the application needs additional resources.  (https://www.youtube.com/watch?v=lhVF9-wgd2M&t=1639s) Containers are updated with "registry keys and files" during "exercising" of the application.

Claim	US 8,943,500 Claim Term	Analysis
		The more you use the tethered application, the more VirtaMove learns about it. Exercise the application as much as possible before you disable Tether. Many registry keys and files do not get pulled across unless certain parts of the application are exercised. For example, right-click operations in SQL Management Studio will not work untethered if they were not exercised while tethered. **Note:** An application may run more slowly than you are used to when it is tethered. This is temporary; the application will run as usual on the destination machine once you have exercised the application and completed Tether. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311394514/Exercising+Your+Application) ## Update Mode Using Update Mode, any files or keys that are newest will be copied. If you changed a file on both the source and destination machines, the newest file will be copied. Changes that have been made to the destination machine may not be preserved in Update Mode. You should therefore keep track of changes that were made to the destination for re-hosting or other reasons because these changes may need to be repeated. Example Use: An application has been tethered to a destination machine. Work has been performed on the destination machine, for example testing or re-configuration. Later, when you want to finalize the migration, you re-tether to the original production machine to get any files that have been updated or added. For example, a website installation to which changes have been made. In this case, you would use Update Mode to avoid losing modifications to the destination machine.

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311329719/Using+Tether+Sync) "You can upgrade existing containers using the Administrative Console or the virtaupgrade CLI command." Upgrading Containers TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 28, 2022 • 1 min read You can upgrade existing containers using the Administrative Console or the virtaupgrade CLI command. Containers that require upgrading are indicated in Administrative Console by the label "Needs Upgrade". When you upgrade a container, a backup folder is created in the container folder. Test the upgraded container and then delete the backup folder when you are satisfied that the container is running correctly. **To Upgrade a Container** 1. In the Administrative Console, select the container that requires upgrading. 2. Select **Upgrade** in the toolbar. The status of the appliance changes to "Undocked". You can now select and dock the upgraded container. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/313622641/Upgrading+Containers) VirtaMove's "Config-on-the-fly" feature updates configuration information of containers.

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311263613/Config-on-the-Fly) VirtaMove's *virtacreate* "command ***creates or updates a container.***" The *virtacreate*'s functionality inherently ensures that the isolated environments—i.e., VirtaMove's containers—can be dynamically updated in response to the evolving needs of the applications they house. By allowing both the creation and updating of containers, VirtaMove provides mechanism for the isolated environments to adapt over time, accommodating new or changed application resources.

Claim	US 8,943,500 Claim Term	Analysis

		virtacreate
		Owned by Thomas Farley (Deactivated) •••
		Last updated: Mar 28, 2022 • 1 min read
		This command creates or updates a container. Administrator privileges are required.
		You cannot create a container if shortnames are disabled (if `NtfsDisable8dot3NameCreation` is set to 1 in the registry key `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\File System`).
		Syntax
		`VIRTACREATE Appliance /E`
		`VIRTACREATE Appliance /C <path_to_appliance_to_clone>`
		`VIRTACREATE Appliance /N <path_to_template>`
		`VIRTACREATE Appliance /T <path_to_template> [<server|server username password>]`
		Options
		Option / Description
		Appliance — Full path of the container to create or update. The path cannot contain spaces.
		/E — Create a container with no file set (contains only VirtaMove proprietary files and properties).
		/C — Clone a container.
		/N — Create a container from a container template.
		/T — Create a container from a container template using tether. Credentials can be provided. If VirtaMove Source Agent is installed on the source machine, you do not need to provide credentials for the source machine.
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314212506/virtacreate)
		VirtaMove provides “cloud tools to manage app usage” and “optimized storage,” indicating that updates occur as applications use additional resources.

Claim	US 8,943,500 Claim Term	Analysis
		3 Up-level your apps VirtaMove doesn't copy outdated OSs to VMs. It up-levels apps to new OS versions. VM noise is reduced by moving apps from old OSs like WS2003 or WS2008 to a modern, greenfield OS like WS2012, WS2016, and WS2019. Uplifting apps to a new OS can be done with less than one-quarter of the bandwidth, storage, and processing needed for full VM cloning. Up-leveling closes security holes. 4 Use advanced cloud tools A modern OS lets you use advanced datacenter and cloud tools to manage app usage and reduce VM noise levels. You avoid the cost of patching and maintaining old OSs. Better OS management and fresh app installs mean less noisy operations with: ▫ Optimized storage ▫ Improved performance (https://virtamove.com/blog/virtamove-as-a-devops-tool/)
1f	wherein the one or more isolated environments are removed as part of an uninstall of the one or more applications;	The Accused Products comprise a system "wherein the one or more isolated environments are removed as part of an uninstall of the one or more applications." VirtaMove offers the "dissolve" functionality, where isolated environments—i.e., VirtaMove's containers—are copied to a system and then "dissolved." By choosing to "dissolve" the container, the container is removed, and the contents of the container, which includes the application, are transferred to the underlying operating system of the destination machine. **Moving Containers** To move a container between two machines, you must compress the container into a .cap file. You move only .cap files between machines. If scripts are required for the tethering process, place the scripts in the container's `scripts` folder before you move a container.

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/313884729/Moving+Compressing+and+Deleting+Containers) 6. Run VirtaMove Dissolve if you want to remove the migration container from the application and transfer the application to the underlying operating system on the destination machine so that the application will behave as if natively installed. Note that this process cannot be reversed. See Dissolving a Virtual Container. You may wish to keep the application running in the migration container, as required. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310739347/The+Application+Migration+Process) Dissolving a Container TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 28, 2022 • 2 min read After you have migrated an application and exercised it, you can choose to dissolve the migration container. This transfers the application to the underlying operating system of the destination machine so that the migrated application behaves as if it had been installed there. All dependencies on VirtaMove are removed. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311394908/Dissolving+a+Container)

About Dissolve

TF Owned by Thomas Farley (Deactivated) •••
Last updated: Mar 28, 2022 • 4 min read

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- The Dissolve Process
- Application-Specific User and Group Accounts
- Dissolve and Drive Letters
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- Using Config-on-the-fly with Dissolve
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- Config-on-the-fly on Demand and Dissolve
- Dissolving IIS Applications
- Enabling Dissolve for an Existing Installation
  - To Enable Dissolve for an Existing VirtaMove Installation

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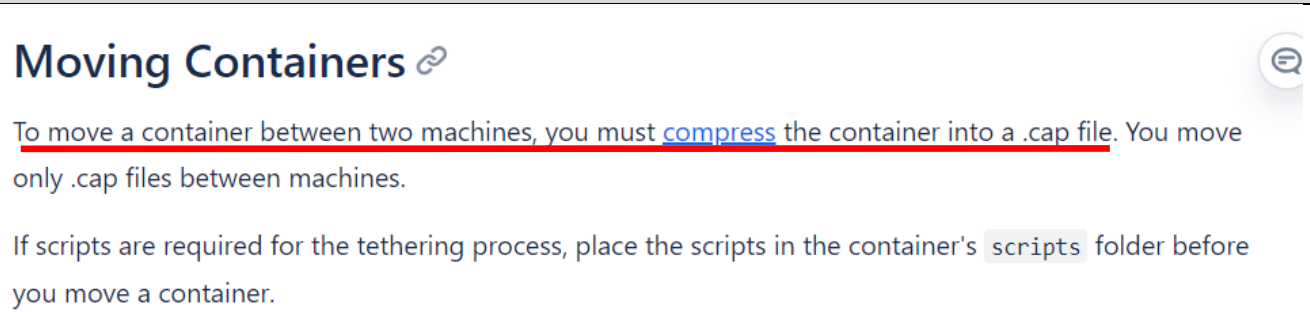
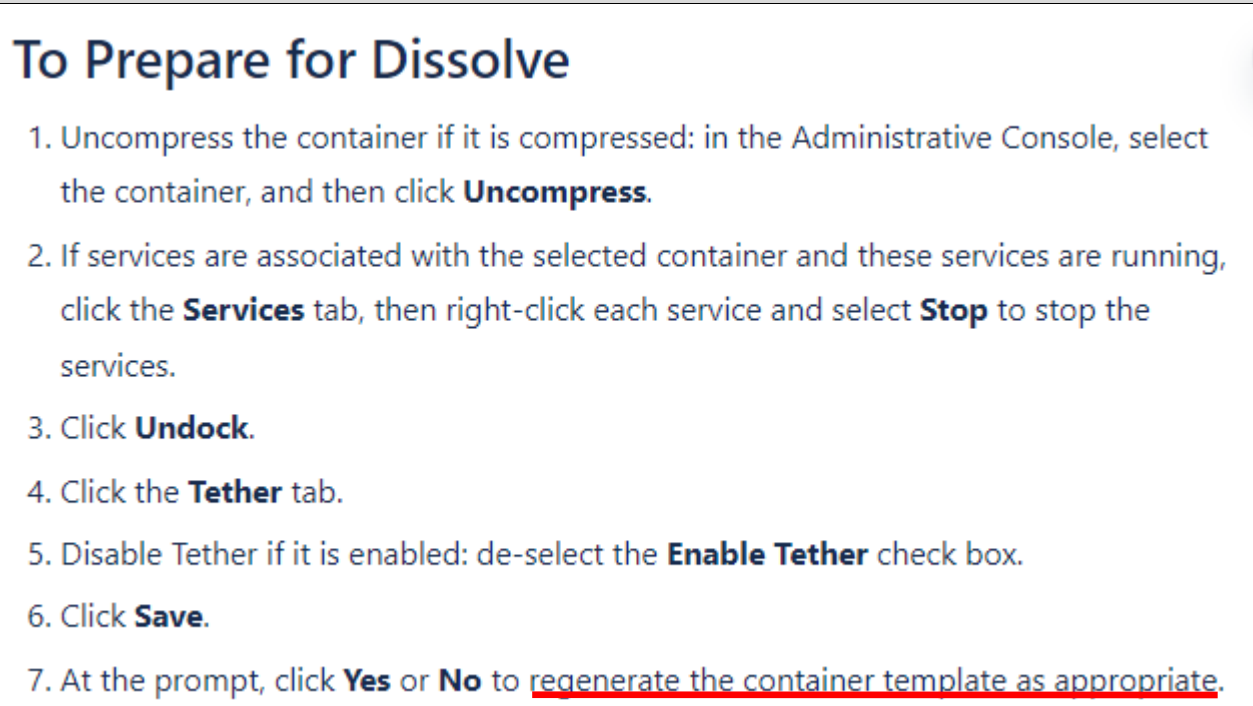
Dissolve is a VirtaMove CLI utility that lets you remove VirtaMove encapsulation from the migration container and transfer the migrated application to the underlying operating system of the destination machine so that the application will behave as if natively installed.

There is no limit to the number of times that you can run the virtadissolve command on an appliance. If your VirtaMove license key does not include Dissolve, contact your VirtaMove Sales Representative to inquire about evaluating the Dissolve function.

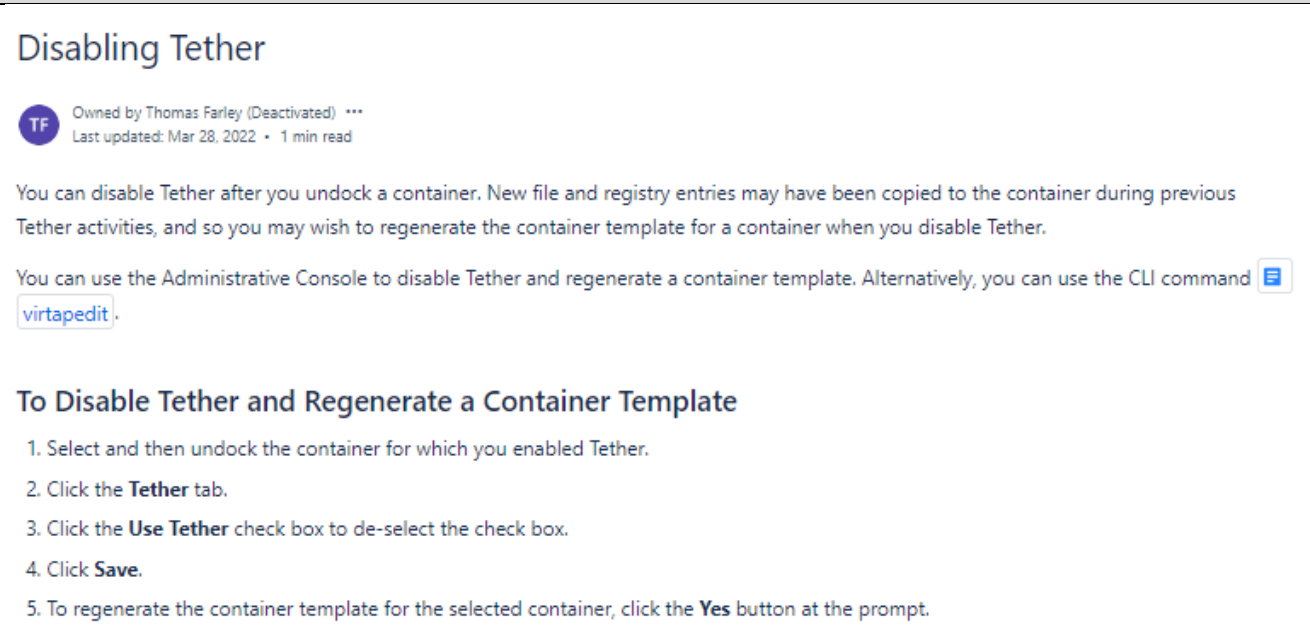
Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311460124/About+Dissolve) "Once user acceptance testing (UAT) of the application is complete, ***the application can be removed from its container*** and installed onto the destination operating system, ***removing any dependency on VirtaMove software***. Now the application has been fully migrated onto the new destination server and the legacy Windows 2003 server can be ***decommissioned***." **#5 – TEST. TEST AGAIN. AND TEST SOME MORE** Thanks to all your preparations, the migration rubber hits the road. You're going zero to sixty in no time, and you feel the wind in your hair. Following VirtaMove's rigorous migration methodology, with Scott riding shotgun beside you, means success at this stage. Now's the time to thoroughly test the application while it's still tethered in its container. Use all of the components and features of the application to make sure that everything is working as expected and the application is viable on the destination server. There's no such thing as too much testing. For example, right-click operations in SQL Management Studio will not work untethered if they were not exercised while tethered. Once user acceptance testing (UAT) of the application is complete, the application can be removed from its container and installed onto the destination operating system, removing any dependency on VirtaMove software. Now the application has been fully migrated onto the new destination server and the legacy Windows 2003 server can be decommissioned. (https://virtamove.com/blog/five-keys-to-a-successful-migration/) VirtaMove also allows for moving application containers, backing up said containers, and/or deleting said containers after application migration to the destination machine. Container templates may also be generated and copied to storage.

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/313884729/Moving%2C+Compressing%2C+and+Deleting+Containers)

Claim	US 8,943,500 Claim Term	Analysis
		Docking Docking a container integrates and prepares the container's environment as part of the underlying operating system so that the application is ready to run. When you dock a container, it is registered with VirtaMove and any system definitions that were defined for the container when it was created. System definitions include file associations; in some cases, a file may need to be copied to the operating system. VirtaMove runs a basic sanity test on a container when you attempt to dock the container. Certain conditions on an operating system may interfere with VirtaMove software and an attempt to dock a container, such as an antivirus software or group account permissions. In such a case, the following error message may be displayed when docking fails: `Failed to intercept OS calls. Sanity test failed. Cannot dock.` (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311296481/Docking+and+Undocking+Containers)

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311427461/Dissolving+a+Virtual+Container)

Claim	US 8,943,500 Claim Term	Analysis
		To Delete and Recreate a Container 1. Undock the container using the virtaundock command. 2. Do one of the following: a. Create a backup copy of the container template. Delete the container and then make the necessary changes to the template and use the virtacreate /T command to recreate the container. b. Delete the container and start over. 3. Dock, start the container's services (if required), and run the container to confirm the changes have been made. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314114051/Testing+Containers)

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311394878/Disabling+Tether)

Claim	US 8,943,500 Claim Term	Analysis

virtacreate

TF Owned by Thomas Farley (Deactivated) •••
Last updated: Mar 28, 2022 • 1 min read

This command creates or updates a container. Administrator privileges are required.

You cannot create a container if shortnames are disabled (if `NtfsDisable8dot3NameCreation` is set to 1 in the registry key `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\File System`).

Syntax

```
1 VIRTACREATE Appliance /E
```

```
1 VIRTACREATE Appliance /C <path_to_appliance_to_clone>
```

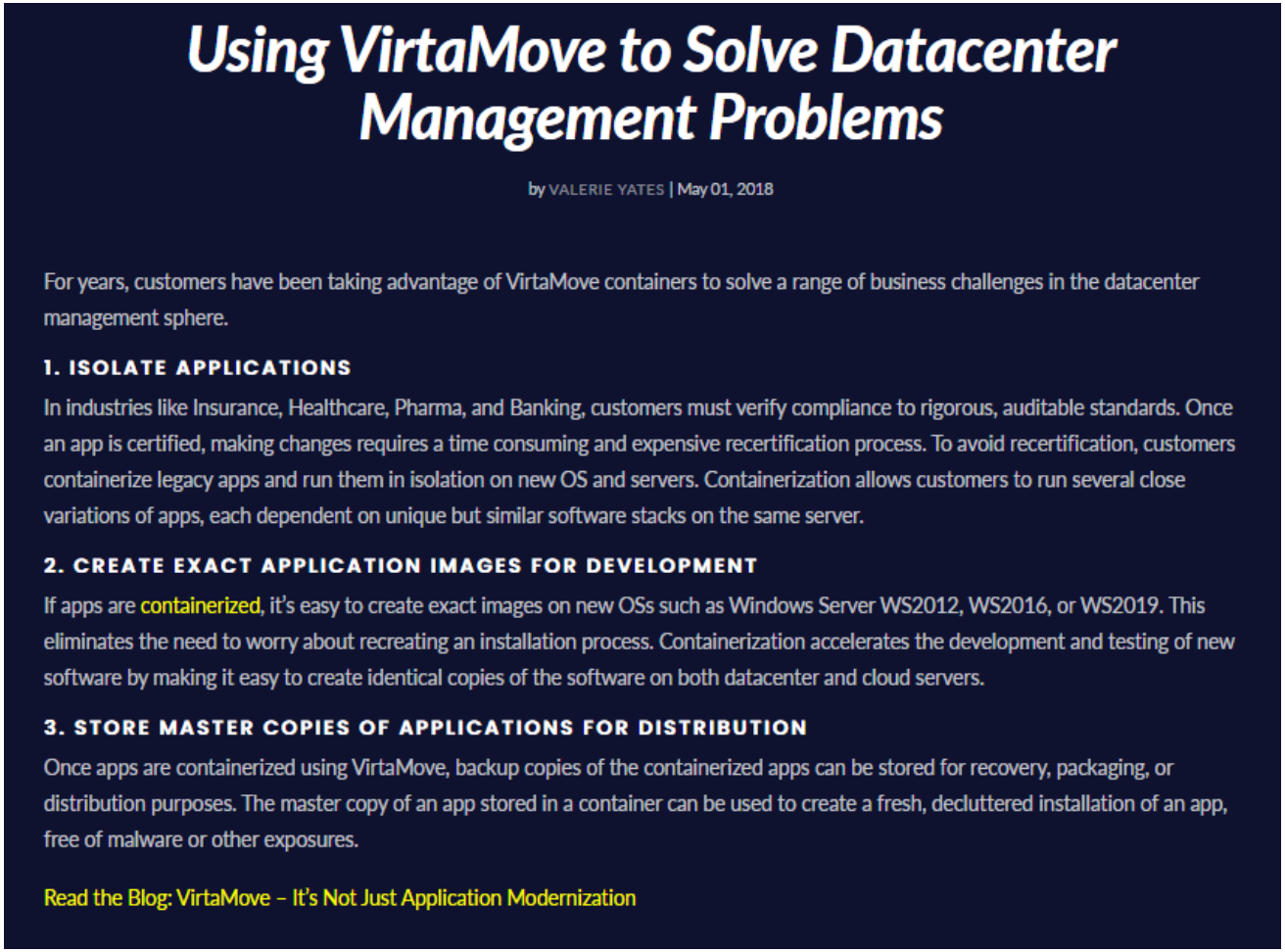
```
1 VIRTACREATE Appliance /N <path_to_template>
```

```
1 VIRTACREATE Appliance /T <path_to_template> [<server|server username password>]
```

Options

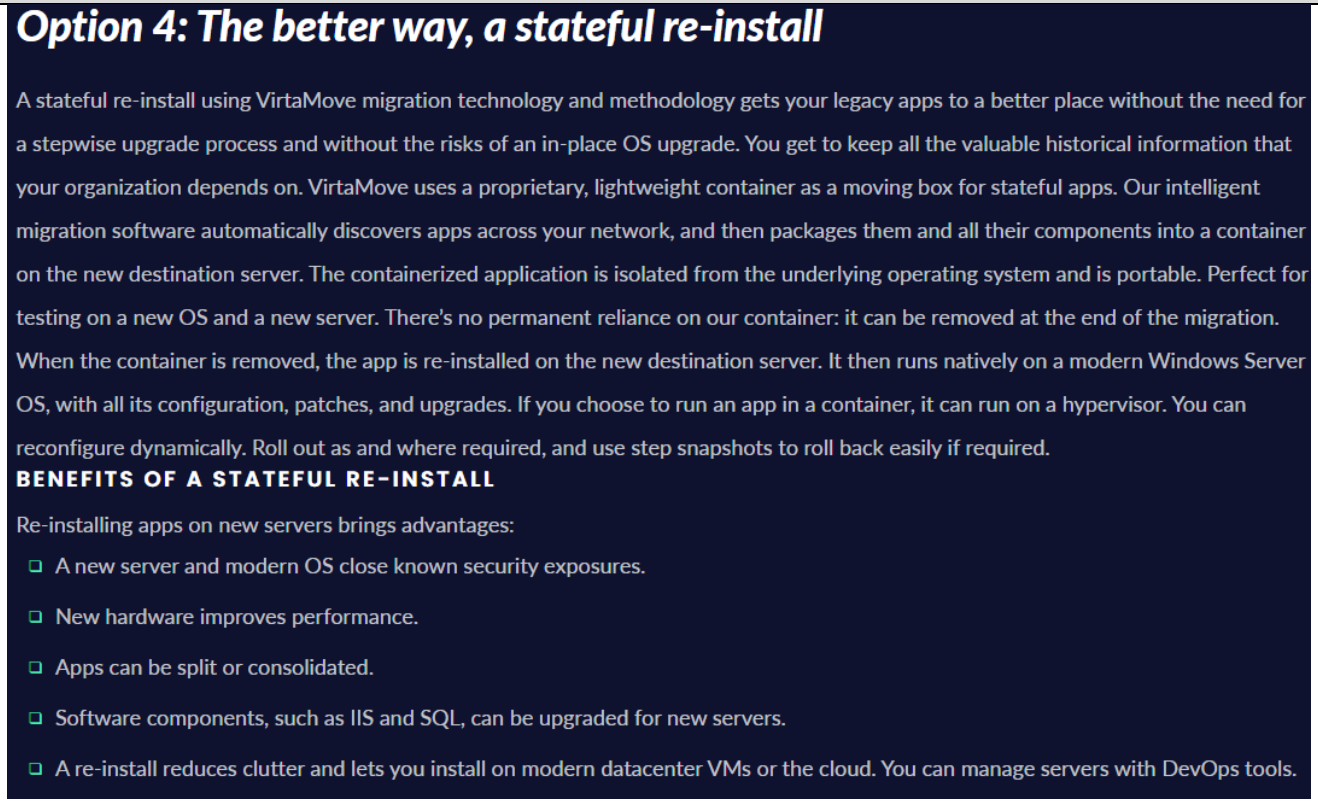
Option	Description
Appliance	Full path of the container to create or update. The path cannot contain spaces.
/E	Create a container with no file set (contains only VirtaMove proprietary files and properties).
/C	Clone a container.
/N	Create a container from a container template.
/T	Create a container from a container template using tether. Credentials can be provided. If VirtaMove Source Agent is installed on the source machine, you do not need to provide credentials for the source machine.

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314212506/virtacreate) Upgrading Containers TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 28, 2022 • 1 min read You can upgrade existing containers using the Administrative Console or the virtaupgrade CLI command. Containers that require upgrading are indicated in Administrative Console by the label "Needs Upgrade". When you upgrade a container, a backup folder is created in the container folder. Test the upgraded container and then delete the backup folder when you are satisfied that the container is running correctly. To Upgrade a Container 1. In the Administrative Console, select the container that requires upgrading. 2. Select **Upgrade** in the toolbar. The status of the appliance changes to "Undocked". You can now select and dock the upgraded container. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/313622641/Upgrading+Containers) Deleting Containers You can delete a container that is no longer required. Use the Administrative Console **Delete** function to delete a container to make sure that a container is undocked and that none of the processes that belong to the container are still running. Do not use the operating system Delete command to delete a container. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pagess/313884729/Moving+Compressing+and+Deleting+Containers) Once applications are containerized using VirtaMove, "***backup copies of the containerized applications can be stored for recovery or distribution purposes***." VirtaMove stores backup copies of containerized

Claim	US 8,943,500 Claim Term	Analysis
		applications, essentially copying the isolated environments to storage. This capability ensures that entire application environments, once isolated and containerized, can be replicated and stored for purposes like recovery, packaging or distribution. If containers—or containerized applications—are no longer required, they may be uninstalled—or deleted, as demonstrated above.  (https://virtamove.com/blog/solve-datacenter-management-problems/)

Claim	US 8,943,500 Claim Term	Analysis
		3. CONTAINERIZE AND ISOLATE APPLICATIONS *The problem:* In regulated businesses, customers need to modernize certified applications that are running on legacy operating systems so that they can enable these apps on a supported OS. In many industries, like Insurance, Healthcare, Pharmaceuticals, and Banking, customers must verify compliance of business applications to rigorous, auditable standards (HIPAA and HITECH, for example, are compliance standards in regulated Healthcare-related businesses). Once an application is certified, making changes requires a time consuming and expensive re-certification process. *The VirtaMove solution:* Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. **4. CREATE IDENTICAL APPLICATION IMAGES FOR TEST, DEVELOPMENT, OR BACKUP** *The problem:* Software development is a demanding business. Under pressure to meet deadlines, software developers might forget about the detailed installation scripts and configuration data required to create identical Cloud or Test copies of an application. Having identical Test and Development environments ensures that you've synchronized and are testing the current development version of software. Where identical development environments are not available, you're likely to see frequent problems with version and feature regression. Having a backup copy of both Development and Production instances is also critical for business continuity. *The VirtaMove solution:* VirtaMove containerizes applications. Containerization accelerates the development and testing of new software by making it easy to create identical copies of the software on both datacenter and Cloud servers, on newer OSs such as Windows Server 2008 R2 , WS2012, or WS2016. This eliminates the need to worry about recreating an installation process or scripts. It lets the developer focus on building software that solves business problems rather than worrying about the details of configuration. Using VirtaMove, applications containterized on WS2008 can run seamlessly on WS2012 or WS2016. Once applications are containerized, backup copies of the containerized applications can be stored for recovery or distribution purposes. The master copy of an application stored in a container can be used to create a fresh, uncluttered installation of an application, free of malware or other exposures. (https://virtamove.com/blog/q-and-a/)

Claim	US 8,943,500 Claim Term	Analysis
		2. CREATE EXACT APPLICATION IMAGES FOR DEVELOPMENT Software development is a demanding business. Under pressure to meet deadlines, software developers may well forget about the detailed installation scripts and configuration data required to create identical cloud or test copies of an application. However, if applications are containerized, it's easy to create exact images on newer OSs such as Windows Server 2008 R2 or WS2012 or WS2016. This eliminates the need to worry about recreating an installation process or scripts. Additionally, applications that are containerized with VirtaMove on WS2008 can run seamlessly on WS2012 or WS2016. Containerization accelerates the development and testing of new software by making it easy to create identical copies of the software on both datacentre and cloud servers. It lets the developer focus on building software that solves business problems rather than worrying about the details of configuration. **3. STORE MASTER COPIES OF APPLICATIONS FOR RECOVERY PURPOSES** Once applications are containerized using VirtaMove, backup copies of the containerized applications can be stored for recovery or distribution purposes. The master copy of an application stored in a container can be used to create a fresh, decluttered installation of an application, free of malware or other exposures. *Isolate, replicate, and recover or distribute.* These are just three of the many benefits and uses of VirtaMove containers, which customers rely on every day. To learn more about other use cases or how VirtaMove can help accelerate and modernize your Windows Server infrastructure, please call or e-mail us. (https://virtamove.com/blog/not-just-app-modernization/) Additional evidence showing VirtaMove's infringement is found in at least the following documents:

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/blog/an-in-place-os-upgrade-isnt-the-answer/)

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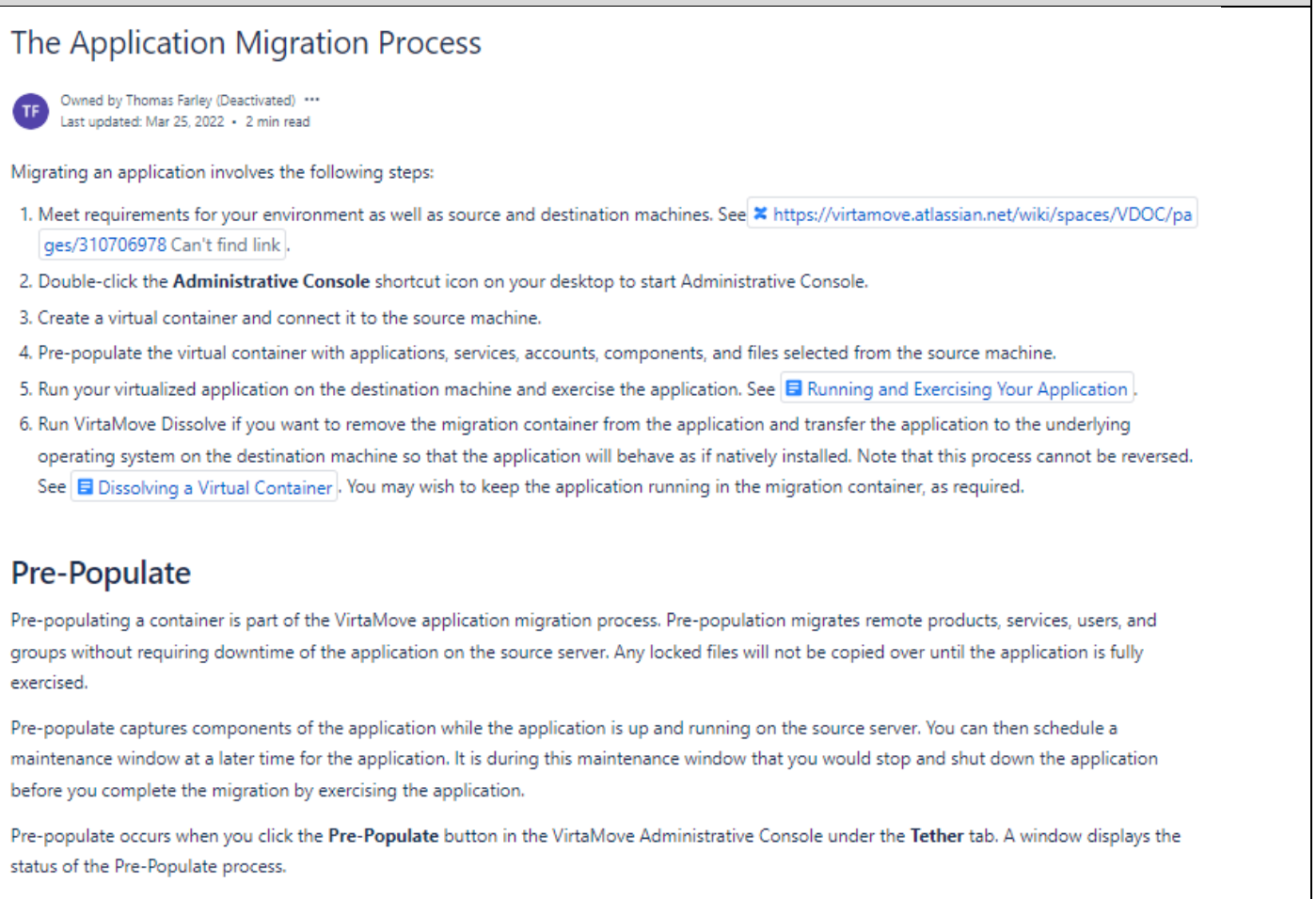
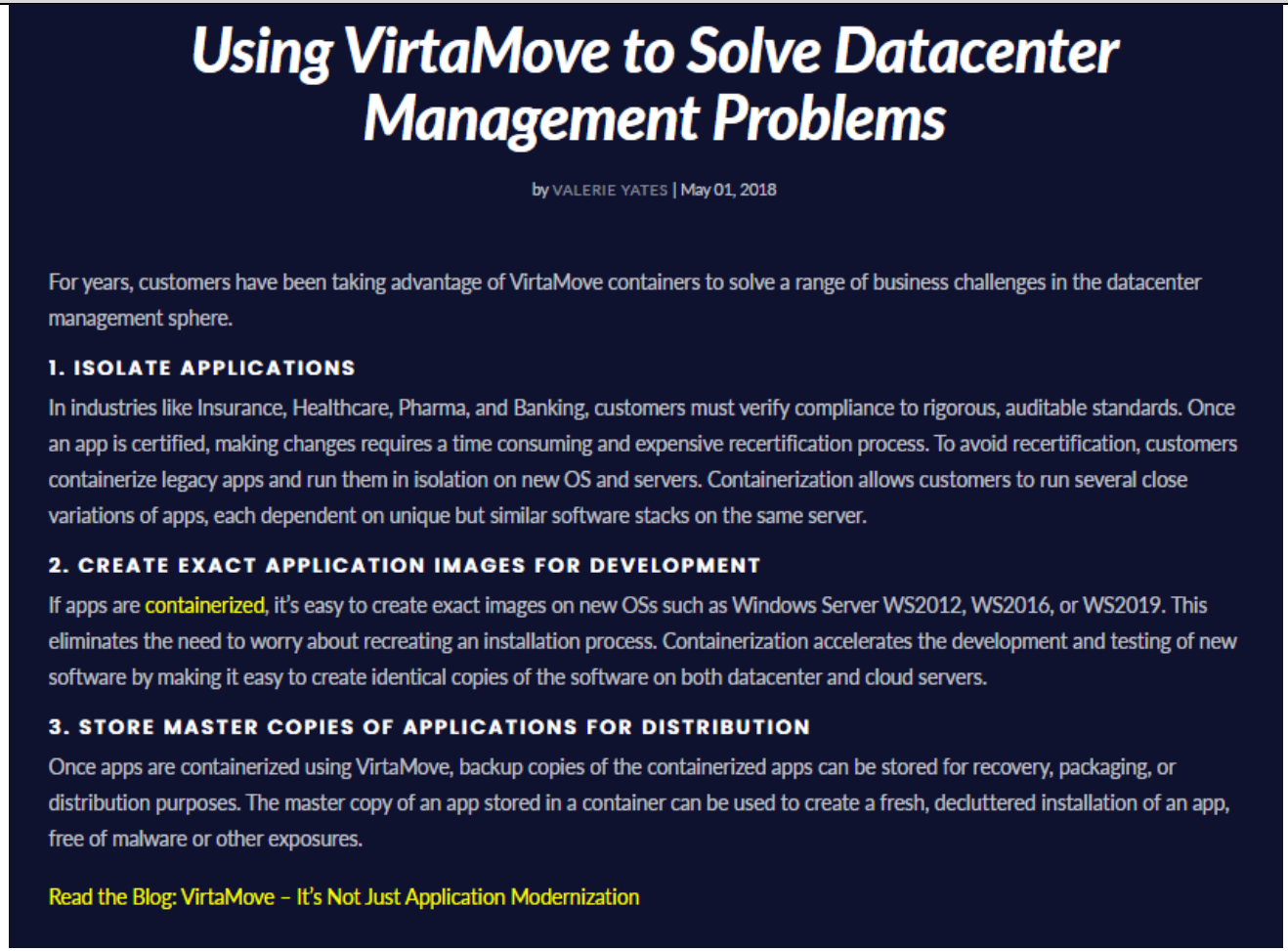
		 (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310739347/The+Application+Migration+Process)

Claim	US 8,943,500 Claim Term	Analysis
		Application install scripts and source code are often missing. If available, they're likely out of date. Using out of date install scripts means that the current state of legacy applications, with all their pre-installed patches and updates, is not captured or containerized. You've simply put the original version of the application in a box, not the legacy system version that is currently in production. In addition, apps that are loaded into a container are permanently dependent on the container, there's no easy rollback to a native OS install. Relying on the container as a destination means the app lives with management overhead, system overhead, and another layer of lock-in. Windows Docker containers won't easily run WS2003 and WS2008 legacy applications on WS2016 or WS2019, now or in the foreseeable future. We've learned from experience many issues need to be addressed to make legacy Windows apps run in a container. So, let's go back to our original question: Is containerizing Windows Server applications always a good idea? Containers may make sense if you're using containers for new greenfield application development or on mature Linux platforms. In this scenario you could leverage APIs, containerization, application virtualization, or a microservices architecture as a basis for new applications. However, using containers by default for legacy applications may not pay off given the performance and management overheads we've discussed. **There's a better way: an automated, stateful, native re-install on the Host OS** Instead of permanently containerizing legacy apps with all the security, performance and maintainability issues in a WDC, you could consider an alternative: an automated, stateful re-install of legacy apps on a modern server and Host OS. At VirtaMove, we use our own lightweight container for isolation and testing on a host server. However, there is no permanent reliance on our container: it can be removed at the end of the moving process. Free of the container, the legacy application can run natively on a modern Host Windows OS. This allows you to manage legacy applications using a conventional change management process and eliminate the permanent overheads of containers. (https://virtamove.com/blog/running-apps-containers-performance-consequences/)
1g	wherein the one or more isolated environments are stored for retrieval at a	The Accused Products comprises a system "wherein the one or more isolated environments are stored for retrieval at a later time after the uninstall of the one or more applications."

Claim	US 8,943,500 Claim Term	Analysis
	later time after the uninstall of the one or more applications.	Whether the Accused Products dissolve the application or delete the container on the destination machine, "the one or more isolated environments are stored for retrieval at a later time." **To Delete and Recreate a Container** 1. Undock the container using the virtaundock command. 2. Do one of the following: a. Create a backup copy of the container template. Delete the container and then make the necessary changes to the template and use the virtacreate /T command to recreate the container. b. Delete the container and start over. 3. Dock, start the container's services (if required), and run the container to confirm the changes have been made. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314114051/Testing+Containers) Once applications are containerized using VirtaMove, "***backup copies of the containerized applications can be stored for recovery or distribution purposes***." VirtaMove stores backup copies of containerized applications, essentially copying the isolated environments to storage. This capability ensures that entire application environments, once isolated and containerized, can be replicated and stored for purposes like recovery, packaging or distribution. If containers—or containerized applications—are no longer required, they may be uninstalled—or deleted, as demonstrated above.

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/blog/solve-datacenter-management-problems/)

Claim	US 8,943,500 Claim Term	Analysis
		3. CONTAINERIZE AND ISOLATE APPLICATIONS *The problem:* In regulated businesses, customers need to modernize certified applications that are running on legacy operating systems so that they can enable these apps on a supported OS. In many industries, like Insurance, Healthcare, Pharmaceuticals, and Banking, customers must verify compliance of business applications to rigorous, auditable standards (HIPAA and HITECH, for example, are compliance standards in regulated Healthcare-related businesses). Once an application is certified, making changes requires a time consuming and expensive re-certification process. *The VirtaMove solution:* Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. **4. CREATE IDENTICAL APPLICATION IMAGES FOR TEST, DEVELOPMENT, OR BACKUP** *The problem:* Software development is a demanding business. Under pressure to meet deadlines, software developers might forget about the detailed installation scripts and configuration data required to create identical Cloud or Test copies of an application. Having identical Test and Development environments ensures that you've synchronized and are testing the current development version of software. Where identical development environments are not available, you're likely to see frequent problems with version and feature regression. Having a backup copy of both Development and Production instances is also critical for business continuity. *The VirtaMove solution:* VirtaMove containerizes applications. Containerization accelerates the development and testing of new software by making it easy to create identical copies of the software on both datacenter and Cloud servers, on newer OSs such as Windows Server 2008 R2 , WS2012, or WS2016. This eliminates the need to worry about recreating an installation process or scripts. It lets the developer focus on building software that solves business problems rather than worrying about the details of configuration. Using VirtaMove, applications containterized on WS2008 can run seamlessly on WS2012 or WS2016. Once applications are containerized, backup copies of the containerized applications can be stored for recovery or distribution purposes. The master copy of an application stored in a container can be used to create a fresh, uncluttered installation of an application, free of malware or other exposures. (https://virtamove.com/blog/q-and-a/)

Claim	US 8,943,500 Claim Term	Analysis

2. CREATE EXACT APPLICATION IMAGES FOR DEVELOPMENT

Software development is a demanding business. Under pressure to meet deadlines, software developers may well forget about the detailed installation scripts and configuration data required to create identical cloud or test copies of an application. However, if applications are containerized, it's easy to create exact images on newer OSs such as Windows Server 2008 R2 or WS2012 or WS2016. This eliminates the need to worry about recreating an installation process or scripts. Additionally, applications that are containerized with VirtaMove on WS2008 can run seamlessly on WS2012 or WS2016.

Containerization accelerates the development and testing of new software by making it easy to create identical copies of the software on both datacentre and cloud servers. It lets the developer focus on building software that solves business problems rather than worrying about the details of configuration.

3. STORE MASTER COPIES OF APPLICATIONS FOR RECOVERY PURPOSES

Once applications are containerized using VirtaMove, backup copies of the containerized applications can be stored for recovery or distribution purposes. The master copy of an application stored in a container can be used to create a fresh, decluttered installation of an application, free of malware or other exposures.

Isolate, replicate, and recover or distribute. These are just three of the many benefits and uses of VirtaMove containers, which customers rely on every day. To learn more about other use cases or how VirtaMove can help accelerate and modernize your Windows Server infrastructure, please call or e-mail us.

(https://virtamove.com/blog/not-just-app-modernization/)

6. Run VirtaMove Dissolve if you want to remove the migration container from the application and transfer the application to the underlying operating system on the destination machine so that the application will behave as if natively installed. Note that this process cannot be reversed. See Dissolving a Virtual Container. You may wish to keep the application running in the migration container, as required.

Claim	US 8,943,500 Claim Term	Analysis
		Dissolving a Container TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 28, 2022 • 2 min read After you have migrated an application and exercised it, you can choose to dissolve the migration container. This transfers the application to the underlying operating system of the destination machine so that the migrated application behaves as if it had been installed there. All dependencies on VirtaMove are removed. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311394908/Dissolving+a+Container)

About Dissolve

TF Owned by Thomas Farley (Deactivated) •••
Last updated: Mar 28, 2022 • 4 min read

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- The Dissolve Process
- Application-Specific User and Group Accounts
- Dissolve and Drive Letters
- Dissolve and vdrives
- Using Config-on-the-fly with Dissolve
  - To Enable Config-on-the-fly Using the Administrative Console
- Config-on-the-fly on Demand and Dissolve
- Dissolving IIS Applications
- Enabling Dissolve for an Existing Installation
  - To Enable Dissolve for an Existing VirtaMove Installation

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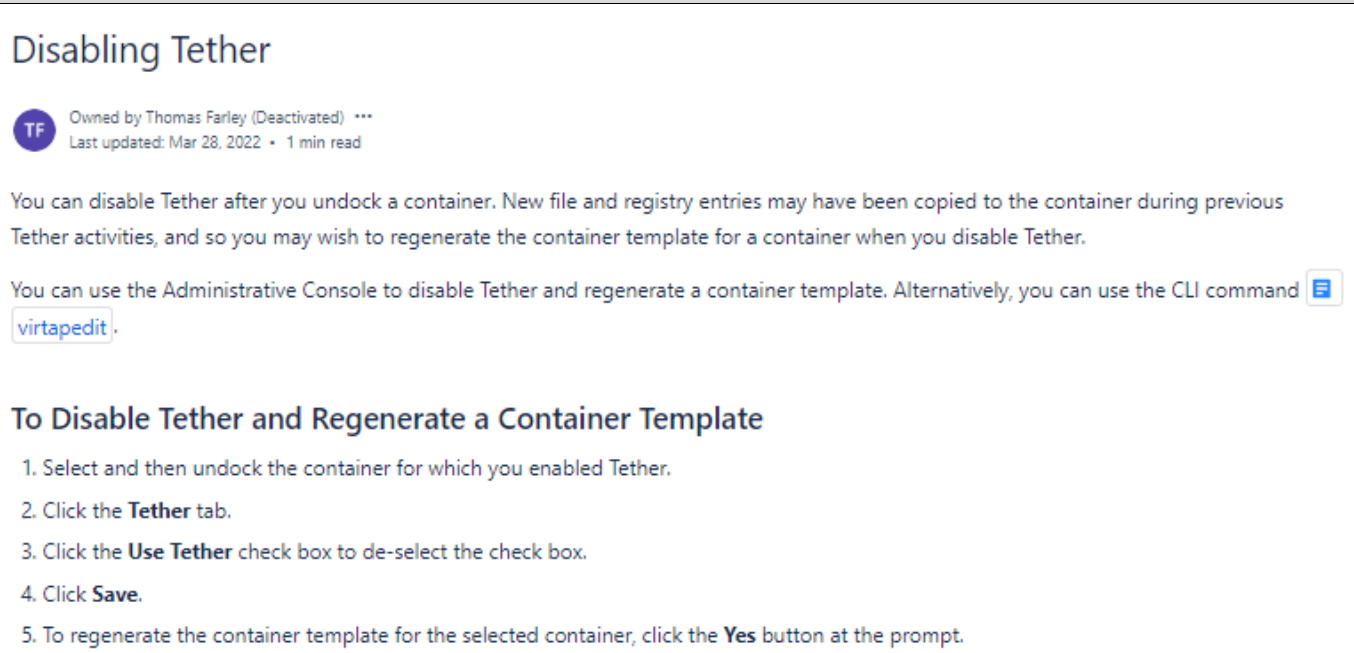
Dissolve is a VirtaMove CLI utility that lets you remove VirtaMove encapsulation from the migration container and transfer the migrated application to the underlying operating system of the destination machine so that the application will behave as if natively installed.

There is no limit to the number of times that you can run the virtadissolve command on an appliance. If your VirtaMove license key does not include Dissolve, contact your VirtaMove Sales Representative to inquire about evaluating the Dissolve function.

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311460124/About+Dissolve) The Accused Products allow for backing up containers and deleting said containers after application migration to the destination machine. **To Prepare for Dissolve** 1. Uncompress the container if it is compressed: in the Administrative Console, select the container, and then click **Uncompress**. 2. If services are associated with the selected container and these services are running, click the **Services** tab, then right-click each service and select **Stop** to stop the services. 3. Click **Undock**. 4. Click the **Tether** tab. 5. Disable Tether if it is enabled: de-select the **Enable Tether** check box. 6. Click **Save**. 7. At the prompt, click **Yes** or **No** to regenerate the container template as appropriate. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311427461/Dissolving+a+Virtual+Container)

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311394878/Disabling+Tether)

virtacreate

TF Owned by Thomas Farley (Deactivated) •••
Last updated: Mar 28, 2022 • 1 min read

This command creates or updates a container. Administrator privileges are required.

You cannot create a container if shortnames are disabled (if `NtfsDisable8dot3NameCreation` is set to 1 in the registry key `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\File System`).

Syntax

```
1 VIRTACREATE Appliance /E
```

```
1 VIRTACREATE Appliance /C <path_to_appliance_to_clone>
```

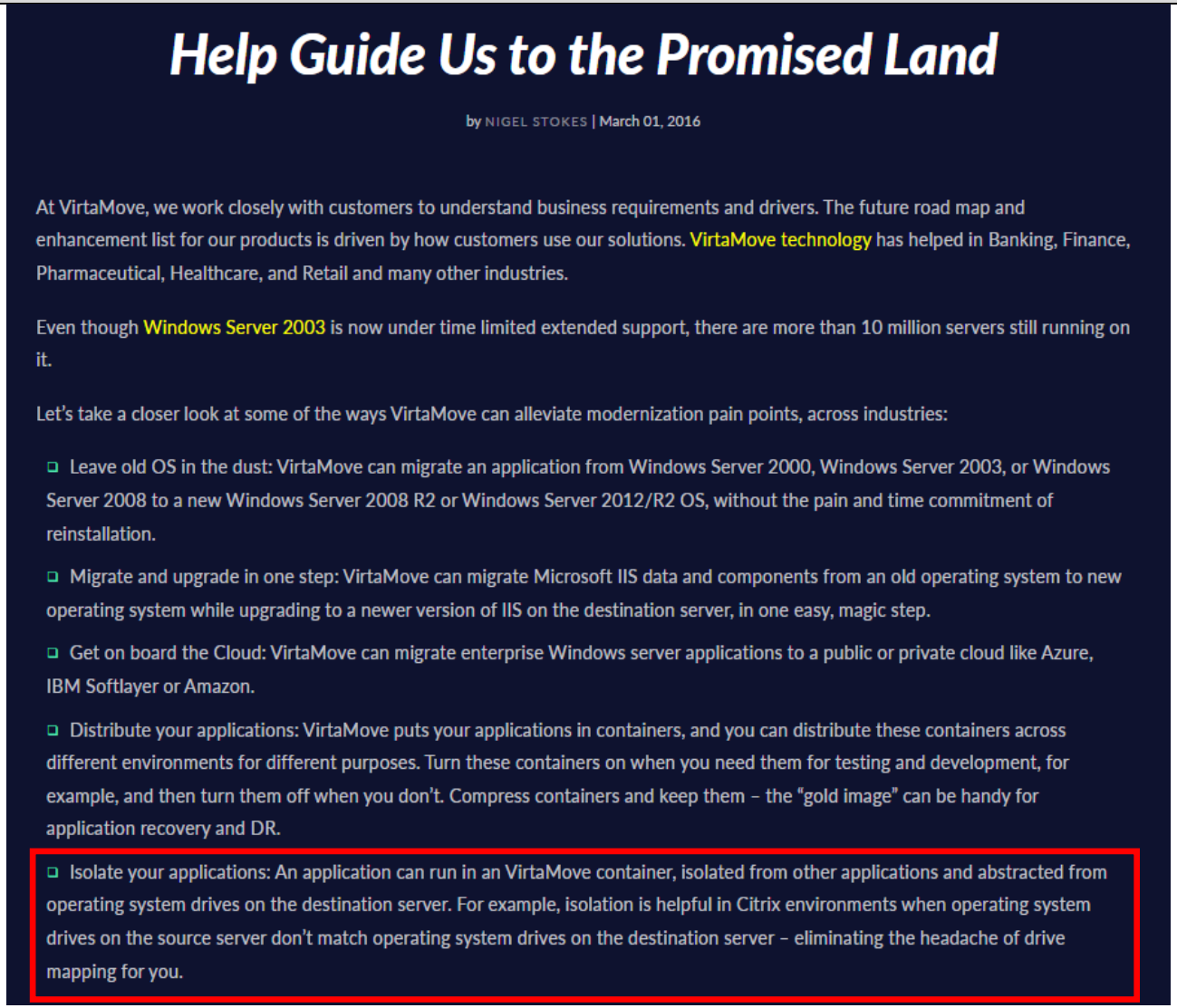
```
1 VIRTACREATE Appliance /N <path_to_template>
```

```
1 VIRTACREATE Appliance /T <path_to_template> [<server|server username password>]
```

Options

Option	Description
Appliance	Full path of the container to create or update. The path cannot contain spaces.
/E	Create a container with no file set (contains only VirtaMove proprietary files and properties).
/C	Clone a container.
/N	Create a container from a container template.
/T	Create a container from a container template using tether. Credentials can be provided. If VirtaMove Source Agent is installed on the source machine, you do not need to provide credentials for the source machine.

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314212506/virtacreate) Upgrading Containers TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 28, 2022 • 1 min read You can upgrade existing containers using the Administrative Console or the virtaupgrade CLI command. Containers that require upgrading are indicated in Administrative Console by the label "Needs Upgrade". When you upgrade a container, a backup folder is created in the container folder. Test the upgraded container and then delete the backup folder when you are satisfied that the container is running correctly. To Upgrade a Container 1. In the Administrative Console, select the container that requires upgrading. 2. Select **Upgrade** in the toolbar. The status of the appliance changes to "Undocked". You can now select and dock the upgraded container. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/313622641/Upgrading+Containers)
2	The system according to claim 1, wherein the one or more applications are isolated from other applications and a host operating system while the one or more applications run within the one or more isolated environments.	The Accused Products comprise a system as claimed in claim 1. *See* claim 1. The Accused Products comprise a system "wherein the one or more applications are isolated from other applications and a host operating system while the one or more applications run within the one or more isolated environments." For example, "[a]n application can run in an VirtaMove container, isolated from other applications."

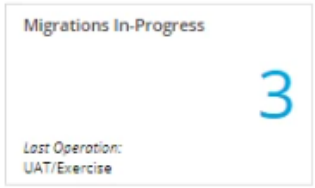
Claim	US 8,943,500 Claim Term	Analysis
		

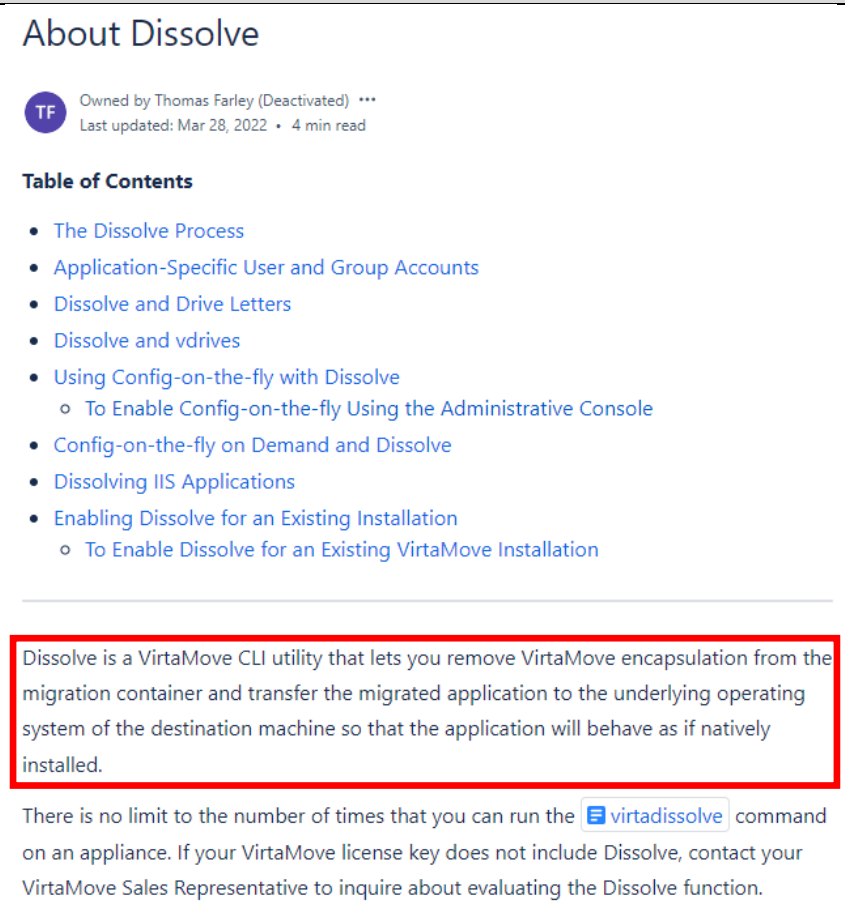
(https://virtamove.com/blog/help-guide-us-to-the-promised-land/)

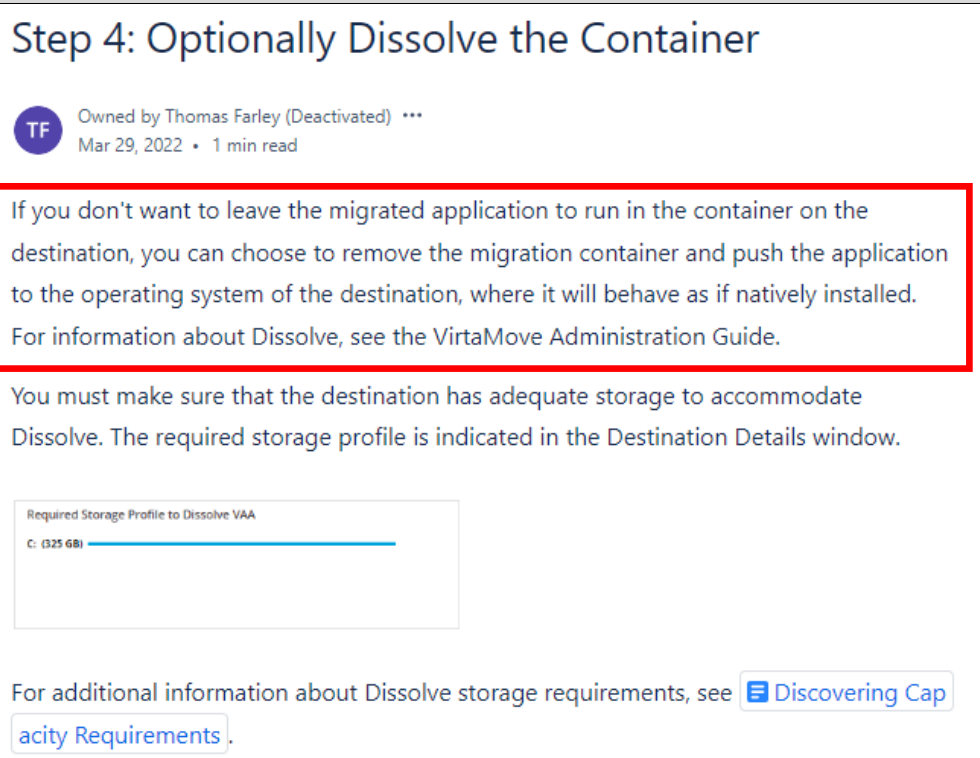
Claim	US 8,943,500 Claim Term	Analysis
		VirtaMove's containers are "isolated environments," where applications are able to run. Indeed, containerized applications are isolated from other applications, whether they are natively installed or in their own respective containers, and from the underlying operating system. About Migrating Applications TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 25, 2022 • 2 min read VirtaMove Application Migration is an intelligent discovery tool that migrates an application and its dependencies from a tethered source machine to a destination machine. VirtaMove extracts existing enterprise applications and packages them into a container that can be provisioned and run natively on any operating system, machine, or cloud. To migrate an application, VirtaMove is not required on the source machine. VirtaMove is required on the destination machine to tether to the application on the source machine and run the migrated virtual application appliance on the destination machine. Once you have migrated the application, you can then dissolve the application to the underlying operating system using VirtaMove Dissolve. You use the VirtaMove Administrative Console to migrate an application. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310444457/About+Migrating+Applications)

Claim	US 8,943,500 Claim Term	Analysis
		The Application Migration Process TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 25, 2022 • 2 min read Migrating an application involves the following steps: 1. Meet requirements for your environment as well as source and destination machines. See https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310706978 Can't find link. 2. Double-click the **Administrative Console** shortcut icon on your desktop to start Administrative Console. 3. Create a virtual container and connect it to the source machine. 4. Pre-populate the virtual container with applications, services, accounts, components, and files selected from the source machine. 5. Run your virtualized application on the destination machine and exercise the application. See Running and Exercising Your Application. 6. Run VirtaMove Dissolve if you want to remove the migration container from the application and transfer the application to the underlying operating system on the destination machine so that the application will behave as if natively installed. Note that this process cannot be reversed. See Dissolving a Virtual Container. You may wish to keep the application running in the migration container, as required. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310739347/The+Application+Migration+Process)

Claim	US 8,943,500 Claim Term	Analysis
		Upgrading Dissolved Applications TF Owned by Thomas Farley (Deactivated) ••• Mar 03, 2022 • 1 min read If you do not dissolve a container and choose to run the migrated application in the container, patch or upgrade tools must run inside the container and not on the underlying operating system. This approach should work if an MSI installer is not used. If there is an MSI installer, then you should dissolve the container and try the upgrade again. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311460195/Upgrading+Dissolved+Applications)

Claim	US 8,943,500 Claim Term	Analysis
		Step 3: Test the Application in the Container TF Owned by Thomas Farley (Deactivated) ••• Mar 29, 2022 • 2 min read Once the migration container is prepopulated with the application and its dependencies, you can start testing the application in the container to make sure that it performs as expected. The Testing team will exercise the application, which means using all its features and functions so that V-Maestro is able to capture these elements in a complete migration template. The testing team will RDP into the destination machine to start the application and perform the exercise operation.  (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314671696/Step+3+Test+the+Application+in+the+Container) "[T]he one or more applications are isolated from other applications and a host operating system while the one or more applications run within the one or more isolated environments" until the applications are dissolved. "Dissolve is a VirtaMove CLI utility that lets you *remove VirtaMove encapsulation from the migration container* and *transfer the migrated application to the underlying operating system of the destination machine* so that the application will behave *as if natively installed*."

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311460124/About+Dissolve)

Claim	US 8,943,500 Claim Term	Analysis
		
3	The system according to claim 1 comprising one or more interception layers configured to intercept access to host operating system resources and host operating system interfaces.	The Accused Products comprise a system as claimed in claim 1. *See* claim 1. The Accused Products comprise a system "comprising one or more interception layers configured to intercept access to host operating system resources and host operating system interfaces."

Claim	US 8,943,500 Claim Term	Analysis
		Docking Docking a container integrates and prepares the container's environment as part of the underlying operating system so that the application is ready to run. When you dock a container, it is registered with VirtaMove and any system definitions that were defined for the container when it was created. System definitions include file associations; in some cases, a file may need to be copied to the operating system. VirtaMove runs a basic sanity test on a container when you attempt to dock the container. Certain conditions on an operating system may interfere with VirtaMove software and an attempt to dock a container, such as an antivirus software or group account permissions. In such a case, the following error message may be displayed wher docking fails: `Failed to intercept OS calls. Sanity test failed. Cannot dock.` (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311296481/Docking+and+Undocking+Containers)

Claim	US 8,943,500 Claim Term	Analysis
		Dock Intercept **This is a blocking issue.** This section indicated whether the sanity test has passed or not on the destination machine. VirtaMove requires the ability to intercept system calls between the application and the operating system on the destination machine. Certain conditions on an operating system may interfere with VirtaMove software and an attempt to dock a container, such as antivirus software or group account permissions. The following error message may be displayed when Audit fails: `1 Failed to intercept OS calls. Sanity test failed. Cannot dock.` (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310804512/Understanding+Audit) CPROP_INTERCEPT_VER — The VirtaMove version that monitors the container properties and system intercepts to ensure the application runs smoothly, just as it would if normally installed directly into the underlying operating system. — Read-only (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314048600/Container+Properties)

Claim	US 8,943,500 Claim Term	Analysis
4	The system according to claim 3, wherein the one or more interception layers intercept calls to the host operating system and system libraries created by the one or more applications.	The Accused Products comprise a system as claimed in claim 3. *See* claim 3. The Accused Products comprise a system, "wherein the one or more interception layers intercept calls to the host operating system and system libraries created by the one or more applications." CPROP_INTERCEPT_VER — The VirtaMove version that monitors the container properties and system intercepts to ensure the application runs smoothly, just as it would if normally installed directly into the underlying operating system. — Read-only (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314048600/Container+Properties) **Docking** Docking a container integrates and prepares the container's environment as part of the underlying operating system so that the application is ready to run. When you dock a container, it is registered with VirtaMove and any system definitions that were defined for the container when it was created. System definitions include file associations; in some cases, a file may need to be copied to the operating system. VirtaMove runs a basic sanity test on a container when you attempt to dock the container. Certain conditions on an operating system may interfere with VirtaMove software and an attempt to dock a container, such as an antivirus software or group account permissions. In such a case, the following error message may be displayed when docking fails: `Failed to intercept OS calls. Sanity test failed. Cannot dock.` (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311296481/Docking+and+Undocking+Containers)

<table>
<tr><th>Claim</th><th>US 8,943,500
Claim Term</th><th>Analysis</th></tr>
<tr><td></td><td></td><td>
Dock Intercept
This is a blocking issue.
This section indicated whether the sanity test has passed or not on the destination machine. VirtaMove requires the ability to intercept system calls between the application and the operating system on the destination machine. Certain conditions on an operating system may interfere with VirtaMove software and an attempt to dock a container, such as antivirus software or group account permissions.
The following error message may be displayed when Audit fails:
<pre>1 Failed to intercept OS calls. Sanity test failed. Cannot dock.</pre>
(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310804512/Understanding+Audit)
</td></tr>
<tr><td>5</td><td>The system according to claim 1 comprising an interception database configured to maintain mapping between host operating system resources inside the one or more isolated environments and outside.</td><td>
The Accused Products comprise a system as claimed in claim 1. See claim 1. The Accused Products comprise a system “comprising an interception database configured to maintain mapping between host operating system resources inside the one or more isolated environments and outside.”

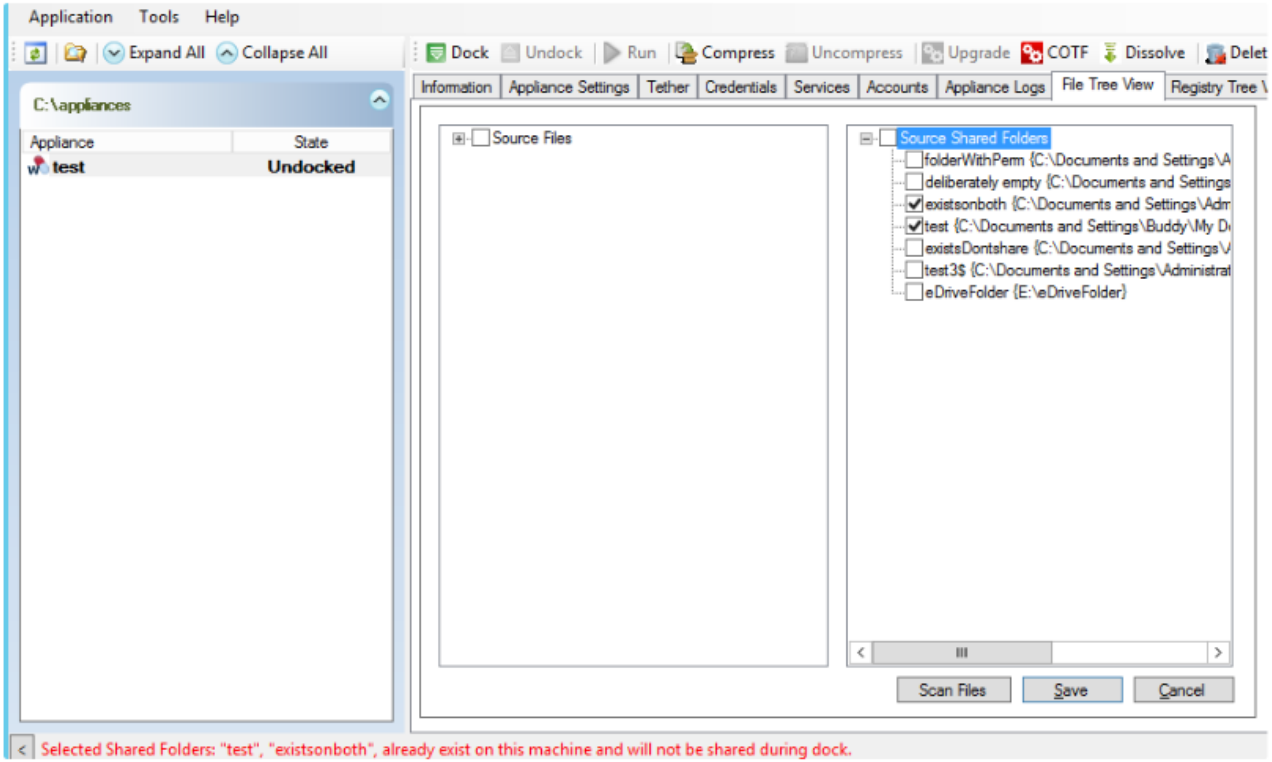
For example, “[t]he VirtaMove version that monitors the container properties and system intercepts to ensure the application runs smoothly, just as it would if normally installed directly into the underlying operating system.”
<table>
<tr><td>CPROP_INTERCEPT_VER</td><td>The VirtaMove version that monitors the container properties and system intercepts to ensure the application runs smoothly, just as it would if normally installed directly into the underlying operating system.</td><td>Read-only</td></tr>
</table>
(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314048600/Container+Properties)
</td></tr>
</table>

Claim	US 8,943,500 Claim Term	Analysis

		## Docking
		Docking a container integrates and prepares the container's environment as part of the underlying operating system so that the application is ready to run.
		When you dock a container, it is registered with VirtaMove and any system definitions that were defined for the container when it was created. System definitions include file associations; in some cases, a file may need to be copied to the operating system.
		VirtaMove runs a basic sanity test on a container when you attempt to dock the container. Certain conditions on an operating system may interfere with VirtaMove software and an attempt to dock a container, such as an antivirus software or group account permissions. In such a case, the following error message may be displayed when docking fails:
		`Failed to intercept OS calls. Sanity test failed. Cannot dock.`
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311296481/Docking+and+Undocking+Containers)
		### Dock Intercept
		This is a blocking issue.
		This section indicated whether the sanity test has passed or not on the destination machine. VirtaMove requires the ability to intercept system calls between the application and the operating system on the destination machine. Certain conditions on an operating system may interfere with VirtaMove software and an attempt to dock a container, such as antivirus software or group account permissions.
		The following error message may be displayed when Audit fails:
		``
		1 Failed to intercept OS calls. Sanity test failed. Cannot dock.
		``
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310804512/Understanding+Audit)

Claim	US 8,943,500 Claim Term	Analysis
		Mapping System Drives TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 28, 2022 • 1 min read VirtaMove supports the deployment of containers where the source and destination machines have different system drives. However, the destination machine must have a local drive assigned the same drive letter as the source machine's system drive. You can use the virtavdrive command to map the system drive from the source machine to a system drive on the destination machine. For example: **Scenario 1:** Source machine Local Drives: C: System Drive: C: Destination machine Local Drives: E: System Drive: E: ``` 1 virtavdrive c:\appliances\mycontainer move c e ``` **Scenario 2:** Source machine Local Drives: C:, E: System Drive: E: Destination machine Local Drives: C:, E: System Drive: C: ``` 1 virtavdrive c:\appliances\mycontainer move e c ``` (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311263679/Mapping+System+Drives)

Claim	US 8,943,500 Claim Term	Analysis
		Mapping NICs between Source and Destination You can use COTF to add or remove NICs to match the number of NICs on the source machine, using selected NICs as COTF parameters. For example, the source machine might have more NICs than the destination. The parameters are stored in the `ipCOTF.xml` file in the `COTF` folder for the selected appliance. If there is a NIC mismatch, the Administrative Console will display a message. You can map the IP addresses manually if you need to correct the mismatch. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311263613/Config-on-the-Fly)

Claim	US 8,943,500 Claim Term	Analysis
		Conflicts and Shared Folders When you select a shared folder, it's possible that it may conflict with a shared folder on the destination machine. In this case, a warning message will appear in the status bar at the bottom of the Administrative Console.  (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311329628/About+Shared+Folders)

Using Filters

Owned by Thomas Farley (Deactivated) •••
Mar 02, 2022 • 1 min read

Use VirtaMove filters to exclude specific paths and registry files from a migration.

You can do this:

- when you create a container
- during tether, or
- when you dissolve, to make sure that specific paths are not transferred to the underlying operating system; for example, to exclude VirtaMove executables

Define filters by:

- editing `UserDefinedFilter` and adding nodes where appropriate, or
- creating filters based on the environments or applications you want to migrate

You create filters by adding a Custom filter entity to the `FilterList.xml` file and copying the custom filter into the `<Installation Directory>\Filters\Custom` folder. The syntax should follow existing filters.

Filters

<Installation Directory>\Filters\VirtaMoveDissolveExcludes.xml	Contains path and registry filters that will automatically be copied to every container that is created. Useful for excluding OS-dependent information from a migration.
<Installation Directory>\Filters\VirtaMoveFilter.xml	This filter excludes all VirtaMove-related products. Useful for excluding VirtaMove Source Agent files.
<Installation Directory>\Filters\FilterList.xml	Contains a list of all the filters in a container.
<Installation Directory>\Filters\Custom\DotNet.xml	A custom filter used to exclude .NET files and registry keys, so that they maintain their integrity on the underlying operating system.
<Installation Directory>\Filters\Custom\LogAndTempFilter.xml	A custom filter used to exclude all log and temporary files, which are usually huge and do not need to be migrated to the new server. Excluding these files speeds up the pre-populate and COTF process.
<Installation Directory>\Filters\Custom\UserDefinedFilter.xml	Stores user-defined filters, which will automatically be used by all filters.

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311066652/Using+Filters) **Dissolve and Shared Folders** During Dissolve, shared folders will be set up to their respective dissolved folder locations. A migrated shared folder will be set up during Dissolve only if the location of the associated directory is not being merged with an existing location. If a folder exists at the dissolve location before dissolving, the shared folder will not be set up. See Migrating Folders, Shared Folders, and Registries for information about how to migrate shared folders. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311329628/About+Shared+Folders) 11. Navigate to the **Services** tab at the top of the Administrative Console. Edit the User Name and Password for a service as appropriate. Note that you are setting a password only; VirtaMove does not validate a password against the original password associated with the source machine. You cannot edit passwords after you click **Dock**. Service User Names must be in the format domain\uid, where uid is the user identifier. This is a restriction of the Microsoft Win32 functions for working with the Service Control Manager (SCM), which is used by VirtaMove. ◦ If you select a service and the service is "Started" on the source machine, tethering will not succeed. Stop the service before tethering by right-clicking the service and then selecting **Stop Source Service**. ◦ If you select a service and the service already exists on the underlying operating system, the **Source Status** column will display **"CONFLICT"**. Resolve the conflict and then press F5 to refresh the list. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311132184/Migrating+an+Application+Using+the+VirtaMove+Administrative+Console)

Claim	US 8,943,500 Claim Term	Analysis

		Testing Containers
		
		TF Owned by Thomas Farley (Deactivated) •••
		Last updated: Mar 28, 2022 • 2 min read
		
		Table of Contents
		
		• About Testing Containers
		  ○ Testing Requirements
		• Testing a Container
		• What If I Find Problems During Testing?
		  ○ To Delete and Recreate a Container
		
		## About Testing Containers
		
		You can test a container to make sure that the appliance runs correctly. Testing a container may include testing container services, for example. Once you are satisfied that the container runs correctly, you can then move the appliance to the destination machine.
		
		You can test an appliance on either the source machine or the destination machine.
		
		### Testing Requirements
		
		If you are testing on the destination machine, make sure that the environment is configured to meet the configuration requirements of the application or service in the appliance. For more information, see your application documentation for system configuration requirements.
		
		To avoid service conflicts where appliances with services from the source machine already exist on the destination, VirtaMove will display an error message and prevent the local service from starting. You must resolve this conflict by either removing the service from the destination or removing the service from the container.
		
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314114051/Testing+Containers)

Claim	US 8,943,500 Claim Term	Analysis

		# Using Tether Sync
		
		TF Owned by Thomas Farley (Deactivated) •••
		Last updated: Mar 28, 2022 • 4 min read
		
		Table of Contents
		
		• Update Mode
		• Reset Mode
		• What Gets Synced?
		  ◦ To Use Tether Sync
		  ◦ To Use Tether Sync Using the CLI
		• Tether Synch Log
		
		Tether Sync allows a container to be populated with files and registry keys and then updated later. The Tether Sync feature is useful if you are not able to move some files (e.g., locked databases) right away but instead, need to wait for a service window. In a case like this, Tether Sync allows you to tether as much at the source as possible in advance and then re-connect later during a service window in order to finish the migration. Any new or different files/keys will be re-copied from the source, and files/keys that have been removed from the source will also be removed.
		
		A container must be undocked to apply Tether Sync. An application will not start until the Tether Sync process is complete.
		
		Tether Sync modes are:
		
		• Update
		• Reset

Update Mode

Using Update Mode, any files or keys that are newest will be copied. If you changed a file on both the source and destination machines, the newest file will be copied. Changes that have been made to the destination machine may not be preserved in Update Mode. You should therefore keep track of changes that were made to the destination for re-hosting or other reasons because these changes may need to be repeated.

Example Use:

An application has been tethered to a destination machine. Work has been performed on the destination machine, for example testing or re-configuration. Later, when you want to finalize the migration, you re-tether to the original production machine to get any files that have been updated or added. For example, a website installation to which changes have been made. In this case, you would use Update Mode to avoid losing modifications to the destination machine.

Reset Mode

Using Reset Mode, any files or keys that are different between the source and destination machines will be overwritten. Changes that have been made to the container on the destination machine will not be preserved in Reset Mode. You should therefore keep track of changes that were made to the destination for re-hosting or other reasons because these changes will need to be repeated.

Example Use:

An application has been migrated for user acceptance testing (UAT) and has been extensively exercised. It's possible that files have been modified, added, or removed during UAT and these changes are not wanted on the production server. In this case, Reset Mode would return the container to the original state it was in and copy any additional changes from the source machine.

Caution:

VirtaMove does not recommend that you perform a Tether Sync in Reset Mode for an IIS application migration. This mode will undo all changes, including any modifications made by IIS migration scripts. IIS services may not start if you perform a Tether Sync in Reset Mode for an IIS application migration.

Claim	US 8,943,500 Claim Term	Analysis
		## What Gets Synced? Tether Sync does not synchronize everything on the source machine to the destination machine. Only paths and keys that have previously been tethered will be checked against the source machine. Specifically, individual files that have been copied will be checked against the source machine as well as paths that were copied in entirety (greedy copied). **For example:** If you have a complete copy of "`\Program Files\SQL Server`" and you add directory "`\Program Files\SQL Server\some_folder`", then a sync operation will copy "`some_folder`" to the destination machine because the "`SQL Server`" folder was greedy copied. If you add "`\Program Files\some_other_folder`", it will not be copied because it is outside of the paths that were greedy copied. To see which paths will be synced, see the `tether_greedy_roots.dat` file in the container folder. This file contains a list of paths that are meant to be synchronized with the source. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311329719/Using+Tether+Sync)

Claim	US 8,943,500 Claim Term	Analysis
		Migrating Scheduled Tasks TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 25, 2022 • 4 min read You can migrate scheduled tasks using the Administrative Console or the CLI using virtatasks. **Notes:** • If you want to migrate user-defined environment variables along with a scheduled task, select and migrate the user account on the **Source Accounts** tab. • Docking or dissolving a container installs a task to the underlying operating system. In doing so, VirtaMove maintains the folder structure that was on the source machine. For Windows Server 2008 and later sources, tasks can be nested under layers of folders. If these folders do not exist when a task is being installed, they will be created on the destination machine to store the task. Undocking the container removes the task from the underlying operating system. However, any folders that were created to store the task will not be removed. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311296093/Migrating+Scheduled+Tasks) Locking or Unlocking a Container You can lock a selected container to make sure that it is not modified during the migration process. Modifications could result in the application not running correctly after the tether process. You can then unlock the container once you're done. To Lock a Container 1. Select a container, and then select **Tools>Lock/Unlock VAA**. 2. Enter a password in the first field. Take note or remember this password for when you want to unlock the container. 3. Confirm the password in the second field, then click **OK**. To Unlock a Container 1. Select the locked container, and then select **Tools>Lock/Unlock VAA**. 2. Enter the password you created to lock the container, then click **OK**. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311263823/Managing+Container+Settings#Locking-or-Unlocking-a-Container)

Claim	US 8,943,500 Claim Term	Analysis
		What Happens if a File Isn't Copied? The tethering process will fail to copy a file or any file under a folder from the source machine if, for example, a file is locked on the source machine by a service or a running application or if the connection to the source machine is lost. If this occurs, the tethering process will not mark such a file as "COMPLETE" until the file is physically copied over from the source machine. If the application requests a file that was not successfully copied over previously, the tethering process will continue to try to copy the file from the source machine until the copy operation is successful. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311230847/Monitoring+Migration)

Claim	US 8,943,500 Claim Term	Analysis

		# Config-on-the-Fly
		
		TF Owned by Thomas Farley (Deactivated) •••
		Last updated: Mar 28, 2022 • 2 min read
		
		Table of Contents
		
		• Config-on-the-fly Files and Paths
		• Config-on-the-fly on Demand
		• Mapping NICs between Source and Destination
		• COTF Log
		
		Your container may contain configuration information from another system and this information may not be compatible with the current system. For example, you may need to change IP addresses or hostnames. You can use a Config-on-the-fly file (*StandardCOTF.xml*) to update the configuration information so that it works with the current system. You may need to update the settings in the configuration file with information from the current system.
		
		You specify the Config-on-the-fly file using the virtapedit command-line utility to update the following property:
		
		`CPROP_CONFIG_FILE`
		
		Container properties (for example, `CPROP_SRC_NODENAME`) can be used as arguments to the `CPROP_CONFIG_FILE` property.
		
		StandardCOTF.xml is located as follows:
		
		`C:\appliances\<ContainerName>\COTF\StandardCOTF.xml`
		
		You can have multiple COTF files in the COTF folder. For example, one file could be for replacing IP addresses and another one for replacing hostnames. V-Migrate will load the combined COTF information from the files in the folder.
		
		## Config-on-the-fly Files and Paths
		
		When you specify a path to a COTF file, note that VirtaMove supports paths that are relative to the container folder. That is, VirtaMove supports:
		
		`".\COTF\StandardCOTF.xml"`
		
		or the absolute full path:
		
		`"C:\appliance\ContainerName\COTF\StandardCOTF.xml"`

Claim	US 8,943,500 Claim Term	Analysis

		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311263613/Config-on-the-Fly)
		
		## Creating a Config-on-the-Fly File
		
		You can use a Config-on-the-fly file to define how specific file/registry items being tethered to on the source machine will be configured on the destination machine. For example, you may need to replace source machine identification information (hostname, IP address, etc.) with the destination machine ID information. You can use the Config-on-the-fly file to accomplish this task.
		
		You can specify the Config-on-the-fly file in the Admin Console by clicking the `COTF` button or using the following property with `virtapedit` command:
		
		`CPROP_CONFIG_FILE`
		
		You can:
		
		• specify the paths to be configured and the actions to be taken for the particular path
		• use container properties (for example, `CPROP_SRC_NODENAME`) as arguments when setting the `CPROP_CONFIG_FILE` property (for example, `virtapedit <path_to_appliance> CPROP_CONFIG_FILE "StandardCOTF.xml CPROP_SRC_NODENAME"`)
		• use wildcards in the `TARGET` tag and the `EXCLUDE` tag of the COTF file to exclude specific files from rehosting
		
		When you create a container, a Config-on-the-fly file is automatically created in the container's COTF folder:
		
		`COTF\StandardCOTF.xml`
		
		When you specify a path to be configured, VirtaMove supports paths that are relative to the container folder. That is, VirtaMove supports:
		
		`".\COTF\StandardCOTF.xml"`
		
		or the absolute full path:
		
		`"C:\appliance\ContainerName\COTF\StandardCOTF.xml"`
		
		You can also specify only the file name of the COTF file if the file is in the `COTF` folder. For example:
		
		`"StandardCOTF.xml"`
		
		If a container requires a custom Config-on-the-fly file, copy the file into the `COTF` folder of the container before you compress and move the container. You can then manually update the `CPROP_CONFIG_FILE` after you uncompress the container to make sure that it is set to the current location of the custom Config-on-the-fly file.

Claim	US 8,943,500 Claim Term	Analysis

		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311460208/Creating+a+Config-on-the-Fly+File)
		
		Showing Custom Scripts When They Run
		
		When you create a container, several scripts are created in the Container\Scripts folder as follows:
		
		`AfterDock.cmd`
		
		`AfterStart.cmd`
		
		`AfterStop.cmd`
		
		`AfterUndock.cmd`
		
		`BeforeDock.cmd`
		
		`BeforeStart.cmd`
		
		`BeforeStop.cmd`
		
		`BeforeUndock.cmd`
		
		Script files can be customized to execute commands, call other batch files, make configuration changes, or make modifications to the system environment to support the applications and services in the container.
		
		Do not rename script files.
		
		Custom scripts can be run before and after docking, starting and stopping container services, and undocking containers.
		
		For example, you can edit the BeforeDock.cmd script to add or remove a user or group from the container:
		
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311263823/Managing+Container+Settings#Showing-Custom-Scripts-When-They-Run)

Claim	US 8,943,500 Claim Term	Analysis

Running Containers

Once a container is docked and any required container services are started, you can run a container application.

To Run a Container Using the Administrative Console

1. Select a container and then click the **Dock** command button.
2. If the container requires services to run, click the **Services** tab, and then start any required services that are not in a "Started" status.
3. Click the **Run** button.

Alternatively, you can right-click a docked container and select **Run Default App** if you want to start the default application for a container.

To Run a Container Using the CLI

At the command prompt, execute:

```
virtadock <container>

virtarun <container>
```

For example:

```
virtarun "D:\Appliances\Notepad " "C:\Program Files\Windows\Notepad.exe"
```

If you specify only the container, the container's startup application will run.

Running Multiple Containers

The virtarun command uses shared memory, which allows VirtaMove to reduce the amount of memory needed when running multiple containers. For example, if you run 10 containers, this does not mean that 10 times the amount of memory is being used.

(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/313688121/Running+Containers)

Claim	US 8,943,500 Claim Term	Analysis
		The Application Migration Process TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 25, 2022 • 2 min read Migrating an application involves the following steps: 1. Meet requirements for your environment as well as source and destination machines. See https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310706978 Can't find link. 2. Double-click the **Administrative Console** shortcut icon on your desktop to start Administrative Console. 3. Create a virtual container and connect it to the source machine. 4. Pre-populate the virtual container with applications, services, accounts, components, and files selected from the source machine. 5. Run your virtualized application on the destination machine and exercise the application. See Running and Exercising Your Application. 6. Run VirtaMove Dissolve if you want to remove the migration container from the application and transfer the application to the underlying operating system on the destination machine so that the application will behave as if natively installed. Note that this process cannot be reversed. See Dissolving a Virtual Container. You may wish to keep the application running in the migration container, as required. **Pre-Populate** Pre-populating a container is part of the VirtaMove application migration process. Pre-population migrates remote products, services, users, and groups without requiring downtime of the application on the source server. Any locked files will not be copied over until the application is fully exercised. Pre-populate captures components of the application while the application is up and running on the source server. You can then schedule a maintenance window at a later time for the application. It is during this maintenance window that you would stop and shut down the application before you complete the migration by exercising the application. Pre-populate occurs when you click the **Pre-Populate** button in the VirtaMove Administrative Console under the **Tether** tab. A window displays the status of the Pre-Populate process. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310739347/The+Application+Migration+Process)

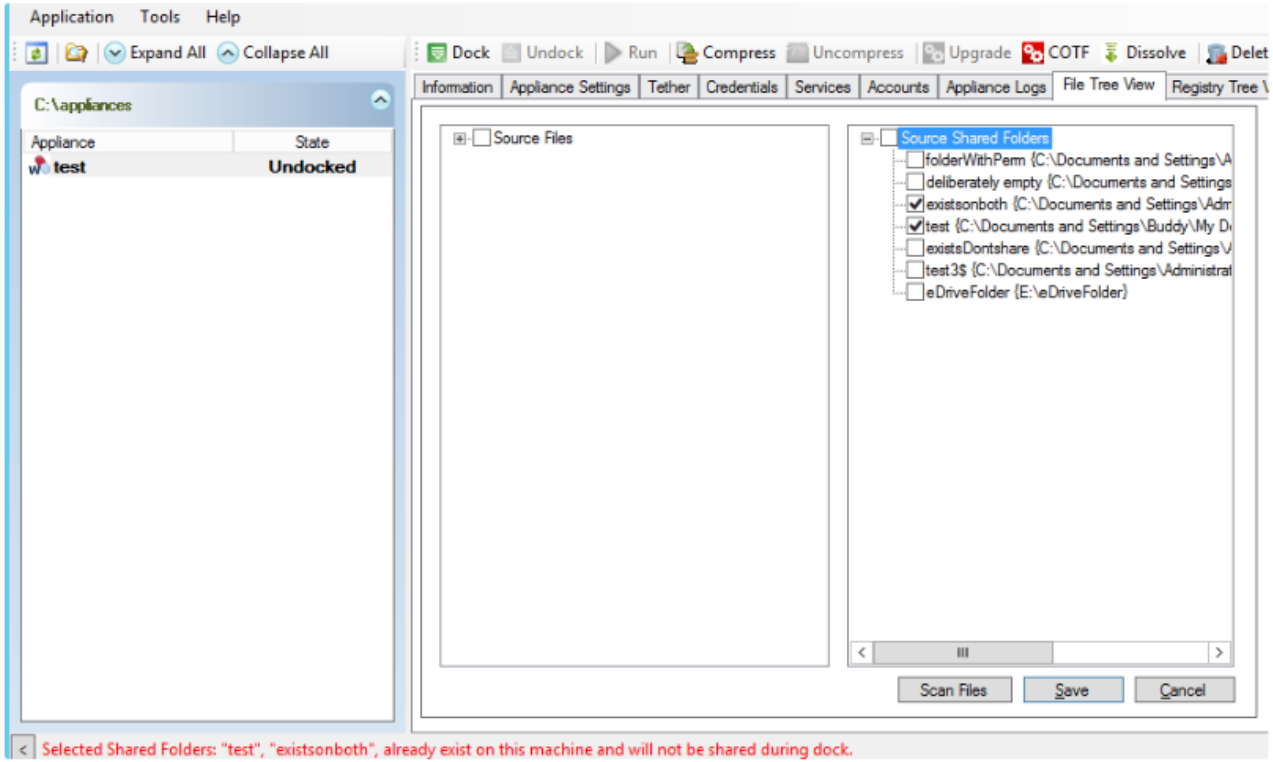
Claim	US 8,943,500 Claim Term	Analysis
		Starting Applications You Want to Monitor TF Owned by Thomas Farley (Deactivated) ••• Mar 03, 2022 • 1 min read Once Source Monitor is enabled on the source machine, you can start the applications and services that are to be monitored. Source Monitor will track all the file system and registry paths accessed by these applications and services. The tracked paths are sent in real-time to the Source Agent, which in turn stores them in an SQLite database. **Note:** If the applications or services were already started before Monitor is enabled, you must restart them after Source Monitor is enabled. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311329129/Starting+Applications+You+Want+to+Monitor)
6	The system according to claim 5, wherein the interception database translates parameters and contexts between a host environment and the one or more isolated environments.	The Accused Products comprise a system as claimed in claim 5. *See* claim 5. The Accused Products comprise a system "wherein the interception database translates parameters and contexts between a host environment and the one or more isolated environments." For example, "[t]he VirtaMove version that monitors the container properties and *system intercepts* to ensure the application runs smoothly, *just as it would if normally installed directly into the underlying operating system*." This includes translating parameters and contexts between a host environment and the isolated environments. CPROP_INTERCEPT_VER — The VirtaMove version that monitors the container properties and system intercepts to ensure the application runs smoothly, just as it would if normally installed directly into the underlying operating system. — Read-only (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314048600/Container+Properties)

Claim	US 8,943,500 Claim Term	Analysis

		## Docking
		Docking a container integrates and prepares the container's environment as part of the underlying operating system so that the application is ready to run.
		When you dock a container, it is registered with VirtaMove and any system definitions that were defined for the container when it was created. System definitions include file associations; in some cases, a file may need to be copied to the operating system.
		VirtaMove runs a basic sanity test on a container when you attempt to dock the container. Certain conditions on an operating system may interfere with VirtaMove software and an attempt to dock a container, such as an antivirus software or group account permissions. In such a case, the following error message may be displayed when docking fails:
		`Failed to intercept OS calls. Sanity test failed. Cannot dock.`
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311296481/Docking+and+Undocking+Containers)
		### Dock Intercept
		This is a blocking issue.
		This section indicated whether the sanity test has passed or not on the destination machine. VirtaMove requires the ability to intercept system calls between the application and the operating system on the destination machine. Certain conditions on an operating system may interfere with VirtaMove software and an attempt to dock a container, such as antivirus software or group account permissions.
		The following error message may be displayed when Audit fails:
		`1 Failed to intercept OS calls. Sanity test failed. Cannot dock.`
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310804512/Understanding+Audit)

Claim	US 8,943,500 Claim Term	Analysis
		Mapping System Drives TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 28, 2022 • 1 min read VirtaMove supports the deployment of containers where the source and destination machines have different system drives. However, the destination machine must have a local drive assigned the same drive letter as the source machine's system drive. You can use the virtavdrive command to map the system drive from the source machine to a system drive on the destination machine. For example: **Scenario 1:** Source machine Local Drives: C: System Drive: C: Destination machine Local Drives: E: System Drive: E: ``` 1 virtavdrive c:\appliances\mycontainer move c e ``` **Scenario 2:** Source machine Local Drives: C:, E: System Drive: E: Destination machine Local Drives: C:, E: System Drive: C: ``` 1 virtavdrive c:\appliances\mycontainer move e c ``` (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311263679/Mapping+System+Drives)

Claim	US 8,943,500 Claim Term	Analysis
		Mapping NICs between Source and Destination You can use COTF to add or remove NICs to match the number of NICs on the source machine, using selected NICs as COTF parameters. For example, the source machine might have more NICs than the destination. The parameters are stored in the `ipCOTF.xml` file in the `COTF` folder for the selected appliance. If there is a NIC mismatch, the Administrative Console will display a message. You can map the IP addresses manually if you need to correct the mismatch. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311263613/Config-on-the-Fly)

Claim	US 8,943,500 Claim Term	Analysis
		Conflicts and Shared Folders When you select a shared folder, it's possible that it may conflict with a shared folder on the destination machine. In this case, a warning message will appear in the status bar at the bottom of the Administrative Console.  (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311329628/About+Shared+Folders)

Using Filters

TF Owned by Thomas Farley (Deactivated) •••
Mar 02, 2022 • 1 min read

Use VirtaMove filters to exclude specific paths and registry files from a migration.

You can do this:

- when you create a container
- during tether, or
- when you dissolve, to make sure that specific paths are not transferred to the underlying operating system; for example, to exclude VirtaMove executables

Define filters by:

- editing `UserDefinedFilter` and adding nodes where appropriate, or
- creating filters based on the environments or applications you want to migrate

You create filters by adding a Custom filter entity to the `FilterList.xml` file and copying the custom filter into the `<Installation Directory>\Filters\Custom` folder. The syntax should follow existing filters.

Filters

<Installation Directory>\Filters\VirtaMoveDissolveExcludes.xml	Contains path and registry filters that will automatically be copied to every container that is created. Useful for excluding OS-dependent information from a migration.
<Installation Directory>\Filters\VirtaMoveFilter.xml	This filter excludes all VirtaMove-related products. Useful for excluding VirtaMove Source Agent files.
<Installation Directory>\Filters\FilterList.xml	Contains a list of all the filters in a container.
<Installation Directory>\Filters\Custom\DotNet.xml	A custom filter used to exclude .NET files and registry keys, so that they maintain their integrity on the underlying operating system.
<Installation Directory>\Filters\Custom\LogAndTempFilter.xml	A custom filter used to exclude all log and temporary files, which are usually huge and do not need to be migrated to the new server. Excluding these files speeds up the pre-populate and COTF process.
<Installation Directory>\Filters\Custom\UserDefinedFilter.xml	Stores user-defined filters, which will automatically be used by all filters.

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311066652/Using+Filters) **Dissolve and Shared Folders** During Dissolve, shared folders will be set up to their respective dissolved folder locations. A migrated shared folder will be set up during Dissolve only if the location of the associated directory is not being merged with an existing location. If a folder exists at the dissolve location before dissolving, the shared folder will not be set up. See Migrating Folders, Shared Folders, and Registries for information about how to migrate shared folders. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311329628/About+Shared+Folders) 11. Navigate to the **Services** tab at the top of the Administrative Console. Edit the User Name and Password for a service as appropriate. Note that you are setting a password only; VirtaMove does not validate a password against the original password associated with the source machine. You cannot edit passwords after you click **Dock**. Service User Names must be in the format domain\uid, where uid is the user identifier. This is a restriction of the Microsoft Win32 functions for working with the Service Control Manager (SCM), which is used by VirtaMove. ◦ If you select a service and the service is "Started" on the source machine, tethering will not succeed. Stop the service before tethering by right-clicking the service and then selecting **Stop Source Service**. ◦ If you select a service and the service already exists on the underlying operating system, the **Source Status** column will display **"CONFLICT"**. Resolve the conflict and then press F5 to refresh the list. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311132184/Migrating+an+Application+Using+the+VirtaMove+Administrative+Console)

Claim	US 8,943,500 Claim Term	Analysis

		Testing Containers
		
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		Last updated: Mar 28, 2022 • 2 min read
		
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		## About Testing Containers
		
		You can test a container to make sure that the appliance runs correctly. Testing a container may include testing container services, for example. Once you are satisfied that the container runs correctly, you can then move the appliance to the destination machine.
		
		You can test an appliance on either the source machine or the destination machine.
		
		### Testing Requirements
		
		If you are testing on the destination machine, make sure that the environment is configured to meet the configuration requirements of the application or service in the appliance. For more information, see your application documentation for system configuration requirements.
		
		To avoid service conflicts where appliances with services from the source machine already exist on the destination, VirtaMove will display an error message and prevent the local service from starting. You must resolve this conflict by either removing the service from the destination or removing the service from the container.
		
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314114051/Testing+Containers)

Claim	US 8,943,500 Claim Term	Analysis

		# Using Tether Sync
		
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		Tether Sync allows a container to be populated with files and registry keys and then updated later. The Tether Sync feature is useful if you are not able to move some files (e.g., locked databases) right away but instead, need to wait for a service window. In a case like this, Tether Sync allows you to tether as much at the source as possible in advance and then re-connect later during a service window in order to finish the migration. Any new or different files/keys will be re-copied from the source, and files/keys that have been removed from the source will also be removed.
		
		A container must be undocked to apply Tether Sync. An application will not start until the Tether Sync process is complete.
		
		Tether Sync modes are:
		
		• Update
		• Reset

Update Mode

Using Update Mode, any files or keys that are newest will be copied. If you changed a file on both the source and destination machines, the newest file will be copied. Changes that have been made to the destination machine may not be preserved in Update Mode. You should therefore keep track of changes that were made to the destination for re-hosting or other reasons because these changes may need to be repeated.

Example Use:

An application has been tethered to a destination machine. Work has been performed on the destination machine, for example testing or re-configuration. Later, when you want to finalize the migration, you re-tether to the original production machine to get any files that have been updated or added. For example, a website installation to which changes have been made. In this case, you would use Update Mode to avoid losing modifications to the destination machine.

Reset Mode

Using Reset Mode, any files or keys that are different between the source and destination machines will be overwritten. Changes that have been made to the container on the destination machine will not be preserved in Reset Mode. You should therefore keep track of changes that were made to the destination for re-hosting or other reasons because these changes will need to be repeated.

Example Use:

An application has been migrated for user acceptance testing (UAT) and has been extensively exercised. It's possible that files have been modified, added, or removed during UAT and these changes are not wanted on the production server. In this case, Reset Mode would return the container to the original state it was in and copy any additional changes from the source machine.

Caution:

VirtaMove does not recommend that you perform a Tether Sync in Reset Mode for an IIS application migration. This mode will undo all changes, including any modifications made by IIS migration scripts. IIS services may not start if you perform a Tether Sync in Reset Mode for an IIS application migration.

Claim	US 8,943,500 Claim Term	Analysis
		What Gets Synced? Tether Sync does not synchronize everything on the source machine to the destination machine. Only paths and keys that have previously been tethered will be checked against the source machine. Specifically, individual files that have been copied will be checked against the source machine as well as paths that were copied in entirety (greedy copied). **For example:** If you have a complete copy of "`\Program Files\SQL Server`" and you add directory "`\Program Files\SQL Server\some_folder`", then a sync operation will copy "`some_folder`" to the destination machine because the "`SQL Server`" folder was greedy copied. If you add "`\Program Files\some_other_folder`", it will not be copied because it is outside of the paths that were greedy copied. To see which paths will be synced, see the `tether_greedy_roots.dat` file in the container folder. This file contains a list of paths that are meant to be synchronized with the source. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311329719/Using+Tether+Sync)

Claim	US 8,943,500 Claim Term	Analysis
		Migrating Scheduled Tasks TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 25, 2022 • 4 min read You can migrate scheduled tasks using the Administrative Console or the CLI using virtatasks. **Notes:** • If you want to migrate user-defined environment variables along with a scheduled task, select and migrate the user account on the **Source Accounts** tab. • Docking or dissolving a container installs a task to the underlying operating system. In doing so, VirtaMove maintains the folder structure that was on the source machine. For Windows Server 2008 and later sources, tasks can be nested under layers of folders. If these folders do not exist when a task is being installed, they will be created on the destination machine to store the task. Undocking the container removes the task from the underlying operating system. However, any folders that were created to store the task will not be removed. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311296093/Migrating+Scheduled+Tasks) Locking or Unlocking a Container You can lock a selected container to make sure that it is not modified during the migration process. Modifications could result in the application not running correctly after the tether process. You can then unlock the container once you're done. To Lock a Container 1. Select a container, and then select **Tools>Lock/Unlock VAA**. 2. Enter a password in the first field. Take note or remember this password for when you want to unlock the container. 3. Confirm the password in the second field, then click **OK**. To Unlock a Container 1. Select the locked container, and then select **Tools>Lock/Unlock VAA**. 2. Enter the password you created to lock the container, then click **OK**. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311263823/Managing+Container+Settings#Locking-or-Unlocking-a-Container)

Claim	US 8,943,500 Claim Term	Analysis
		What Happens if a File Isn't Copied? The tethering process will fail to copy a file or any file under a folder from the source machine if, for example, a file is locked on the source machine by a service or a running application or if the connection to the source machine is lost. If this occurs, the tethering process will not mark such a file as "COMPLETE" until the file is physically copied over from the source machine. If the application requests a file that was not successfully copied over previously, the tethering process will continue to try to copy the file from the source machine until the copy operation is successful. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311230847/Monitoring+Migration)

Claim	US 8,943,500 Claim Term	Analysis

		# Config-on-the-Fly
		
		TF Owned by Thomas Farley (Deactivated) •••
		Last updated: Mar 28, 2022 • 2 min read
		
		Table of Contents
		
		• Config-on-the-fly Files and Paths
		• Config-on-the-fly on Demand
		• Mapping NICs between Source and Destination
		• COTF Log
		
		Your container may contain configuration information from another system and this information may not be compatible with the current system. For example, you may need to change IP addresses or hostnames. You can use a Config-on-the-fly file (*StandardCOTF.xml*) to update the configuration information so that it works with the current system. You may need to update the settings in the configuration file with information from the current system.
		
		You specify the Config-on-the-fly file using the virtapedit command-line utility to update the following property:
		
		`CPROP_CONFIG_FILE`
		
		Container properties (for example, `CPROP_SRC_NODENAME`) can be used as arguments to the `CPROP_CONFIG_FILE` property.
		
		StandardCOTF.xml is located as follows:
		
		`C:\appliances\<ContainerName>\COTF\StandardCOTF.xml`
		
		You can have multiple COTF files in the COTF folder. For example, one file could be for replacing IP addresses and another one for replacing hostnames. V-Migrate will load the combined COTF information from the files in the folder.
		
		## Config-on-the-fly Files and Paths
		
		When you specify a path to a COTF file, note that VirtaMove supports paths that are relative to the container folder. That is, VirtaMove supports:
		
		`".\COTF\StandardCOTF.xml"`
		
		or the absolute full path:
		
		`"C:\appliance\ContainerName\COTF\StandardCOTF.xml"`

Claim	US 8,943,500 Claim Term	Analysis

		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311263613/Config-on-the-Fly)
		
		## Creating a Config-on-the-Fly File
		
		You can use a Config-on-the-fly file to define how specific file/registry items being tethered to on the source machine will be configured on the destination machine. For example, you may need to replace source machine identification information (hostname, IP address, etc.) with the destination machine ID information. You can use the Config-on-the-fly file to accomplish this task.
		
		You can specify the Config-on-the-fly file in the Admin Console by clicking the `COTF` button or using the following property with `virtapedit` command:
		
		`CPROP_CONFIG_FILE`
		
		You can:
		
		• specify the paths to be configured and the actions to be taken for the particular path
		• use container properties (for example, `CPROP_SRC_NODENAME`) as arguments when setting the `CPROP_CONFIG_FILE` property (for example, `virtapedit <path_to_appliance> CPROP_CONFIG_FILE "StandardCOTF.xml CPROP_SRC_NODENAME"`)
		• use wildcards in the `TARGET` tag and the `EXCLUDE` tag of the COTF file to exclude specific files from rehosting
		
		When you create a container, a Config-on-the-fly file is automatically created in the container's COTF folder:
		
		`COTF\StandardCOTF.xml`
		
		When you specify a path to be configured, VirtaMove supports paths that are relative to the container folder. That is, VirtaMove supports:
		
		`".\COTF\StandardCOTF.xml"`
		
		or the absolute full path:
		
		`"C:\appliance\ContainerName\COTF\StandardCOTF.xml"`
		
		You can also specify only the file name of the COTF file if the file is in the `COTF` folder. For example:
		
		`"StandardCOTF.xml"`
		
		If a container requires a custom Config-on-the-fly file, copy the file into the `COTF` folder of the container before you compress and move the container. You can then manually update the `CPROP_CONFIG_FILE` after you uncompress the container to make sure that it is set to the current location of the custom Config-on-the-fly file.

Claim	US 8,943,500 Claim Term	Analysis

		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311460208/Creating+a+Config-on-the-Fly+File)
		
		Showing Custom Scripts When They Run
		
		When you create a container, several scripts are created in the Container\Scripts folder as follows:
		
		`AfterDock.cmd`
		
		`AfterStart.cmd`
		
		`AfterStop.cmd`
		
		`AfterUndock.cmd`
		
		`BeforeDock.cmd`
		
		`BeforeStart.cmd`
		
		`BeforeStop.cmd`
		
		`BeforeUndock.cmd`
		
		Script files can be customized to execute commands, call other batch files, make configuration changes, or make modifications to the system environment to support the applications and services in the container.
		
		Do not rename script files.
		
		Custom scripts can be run before and after docking, starting and stopping container services, and undocking containers.
		
		For example, you can edit the BeforeDock.cmd script to add or remove a user or group from the container:
		
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311263823/Managing+Container+Settings#Showing-Custom-Scripts-When-They-Run)

Claim	US 8,943,500 Claim Term	Analysis

		## Running Containers
		Once a container is docked and any required container services are started, you can run a container application.
		
		### To Run a Container Using the Administrative Console
		1. Select a container and then click the **Dock** command button.
		2. If the container requires services to run, click the **Services** tab, and then start any required services that are not in a "Started" status.
		3. Click the **Run** button.
		
		Alternatively, you can right-click a docked container and select **Run Default App** if you want to start the default application for a container.
		
		### To Run a Container Using the CLI
		At the command prompt, execute:
		`virtadock <container>`
		
		`virtarun <container>`
		
		For example:
		`virtarun "D:\Appliances\Notepad " "C:\Program Files\Windows\Notepad.exe"`
		
		If you specify only the container, the container's startup application will run.
		
		### Running Multiple Containers
		The virtarun command uses shared memory, which allows VirtaMove to reduce the amount of memory needed when running multiple containers. For example, if you run 10 containers, this does not mean that 10 times the amount of memory is being used.
		
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/313688121/Running+Containers)

Claim	US 8,943,500 Claim Term	Analysis
		The Application Migration Process TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 25, 2022 • 2 min read Migrating an application involves the following steps: 1. Meet requirements for your environment as well as source and destination machines. See https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310706978 Can't find link. 2. Double-click the **Administrative Console** shortcut icon on your desktop to start Administrative Console. 3. Create a virtual container and connect it to the source machine. 4. Pre-populate the virtual container with applications, services, accounts, components, and files selected from the source machine. 5. Run your virtualized application on the destination machine and exercise the application. See Running and Exercising Your Application. 6. Run VirtaMove Dissolve if you want to remove the migration container from the application and transfer the application to the underlying operating system on the destination machine so that the application will behave as if natively installed. Note that this process cannot be reversed. See Dissolving a Virtual Container. You may wish to keep the application running in the migration container, as required. **Pre-Populate** Pre-populating a container is part of the VirtaMove application migration process. Pre-population migrates remote products, services, users, and groups without requiring downtime of the application on the source server. Any locked files will not be copied over until the application is fully exercised. Pre-populate captures components of the application while the application is up and running on the source server. You can then schedule a maintenance window at a later time for the application. It is during this maintenance window that you would stop and shut down the application before you complete the migration by exercising the application. Pre-populate occurs when you click the **Pre-Populate** button in the VirtaMove Administrative Console under the **Tether** tab. A window displays the status of the Pre-Populate process. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310739347/The+Application+Migration+Process)

Claim	US 8,943,500 Claim Term	Analysis

Starting Applications You Want to Monitor

TF Owned by Thomas Farley (Deactivated) ···
Mar 03, 2022 • 1 min read

Once Source Monitor is enabled on the source machine, you can start the applications and services that are to be monitored. Source Monitor will track all the file system and registry paths accessed by these applications and services. The tracked paths are sent in real-time to the Source Agent, which in turn stores them in an SQLite database.

Note:
If the applications or services were already started before Monitor is enabled, you must restart them after Source Monitor is enabled.

(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311329129/Starting+Applications+You+Want+to+Monitor)

virtarun

TF Owned by Thomas Farley (Deactivated) ···
Mar 24, 2022 • 1 min read

This command runs a container application. Administrator privileges are not required.

Syntax

```
1 virtarun [/S] [/C <path>] Appliance ["application"]["arguments"]
```

Options

Option	Description
/S	Silent mode. Suppresses dialog box pop-up warning/errors so that batch scripts don't fail.
Appliance	The full path of the container.
application	The full path of the application to run. If an application is not specified, the application specified in the Startup property will run.
arguments	Argument parameters for `application`.
/C	Change to a new working directory at launch.

Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314212693/virtarun)
7	The system according to claim 1, wherein the one or more isolated environments are stored on a local storage.	The Accused Products comprise a system as claimed in claim 1. *See* claim 1. The Accused Products comprise a system, "wherein the one or more isolated environments are stored on a local storage." Once containers are migrated onto the destination machine, the Accused Products perform "docking," which "integrates and prepare the container's environment as *part of the underlying operating system* so that the application is ready to run. When you dock a container, *it is registered with VirtaMove and any system definitions that were defined for the container when it was created. System definitions include file associations; in some cases, a file may need to be copied to the operating system."* **Docking** Docking a container integrates and prepares the container's environment as part of the underlying operating system so that the application is ready to run. When you dock a container, it is registered with VirtaMove and any system definitions that were defined for the container when it was created. System definitions include file associations; in some cases, a file may need to be copied to the operating system. VirtaMove runs a basic sanity test on a container when you attempt to dock the container. Certain conditions on an operating system may interfere with VirtaMove software and an attempt to dock a container, such as an antivirus software or group account permissions. In such a case, the following error message may be displayed when docking fails: `Failed to intercept OS calls. Sanity test failed. Cannot dock.` (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311296481/Docking+and+Undocking+Containers) Indeed, storage capacity on the destination machine is a relevant consideration when migrating application containers.

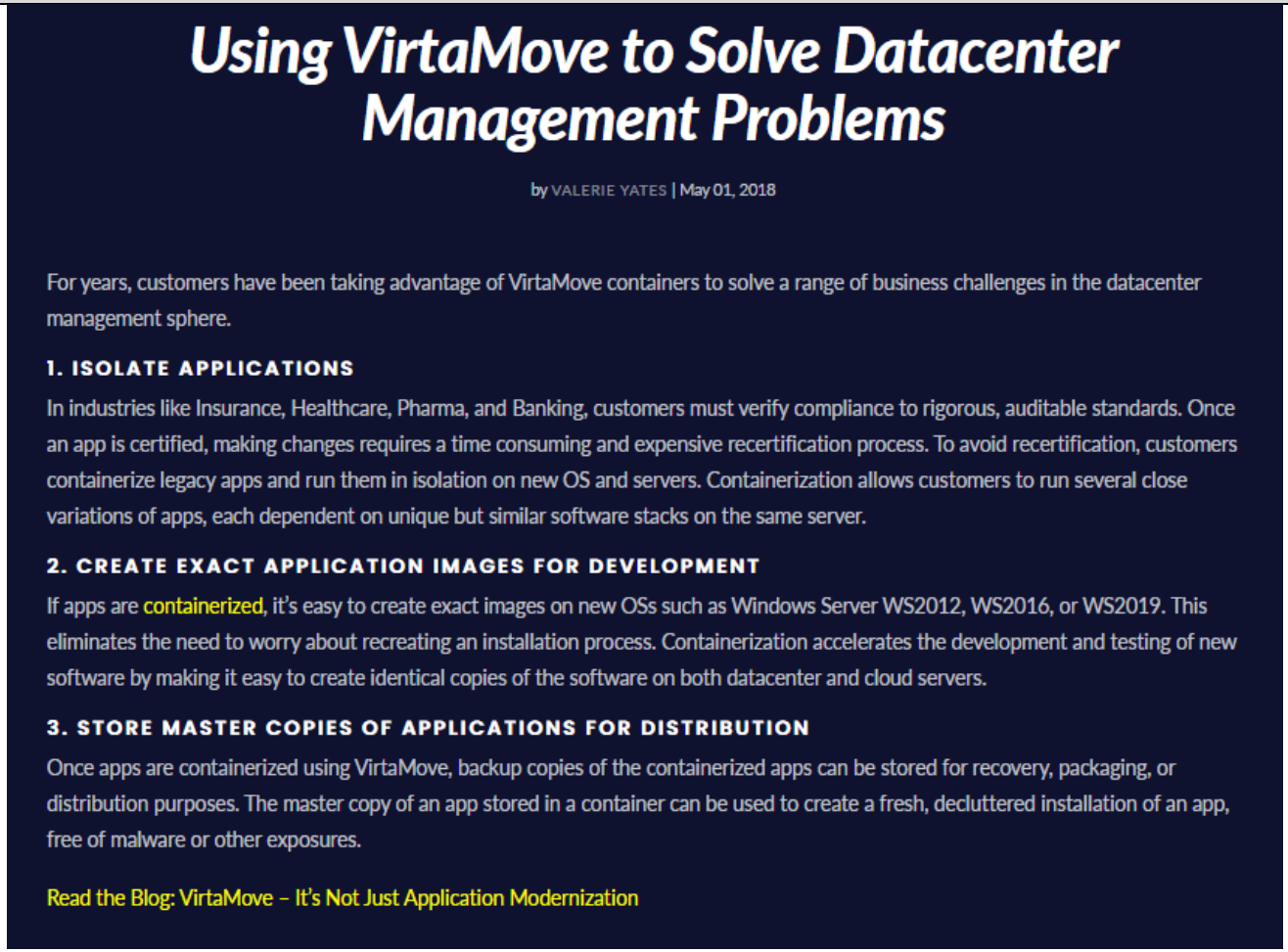
Claim	US 8,943,500 Claim Term	Analysis

The following table lists the elements in the Destination Details window.

Item	Description
Destination System Information card	Displays information about the system of the destination: • IP Address • OS • Any group assigned to the source • CPU • Source. You can assign a destination to a source by clicking Assign. • Memory
Storage Profile card	Displays the number of system disks and storage disks, and the amount of free disk space. Click the toggle icon in the top right of the panel to change the view.
Migrations Complete card	Displays the number of applications migrated to this destination.
Migrations In-Progress card	Displays the number of migrations that are in progress for this destination, and the last operation.
Required Storage Profile to Dissolve VAA card	Displays the storage that is required to dissolve the container, if this information is available.
Filter	Lets you filter the list of destinations by OS, assigned group, or IP/hostname.
	These icons let you perform tasks for the destination. From left to right: • View services on the destination • View user and group accounts associated with the destination • View patches applied to the destination

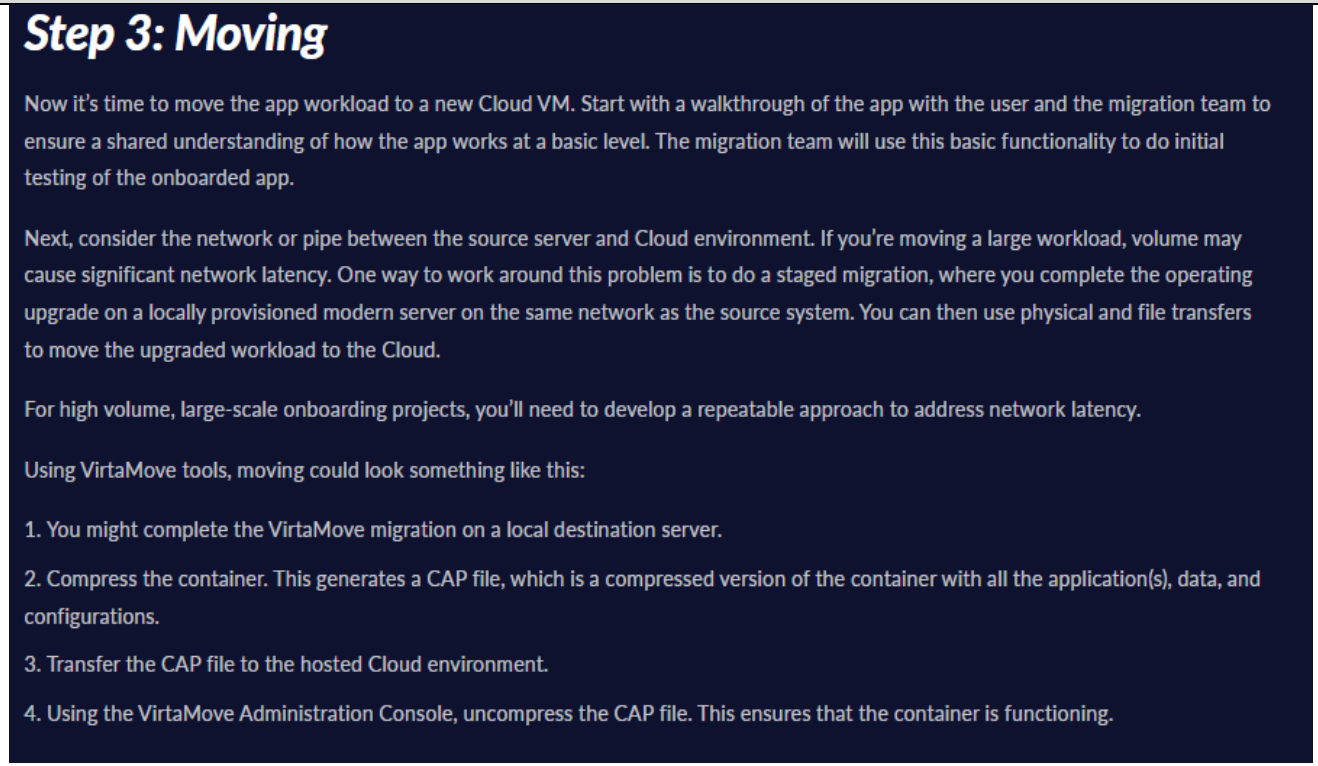
(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314868022/Viewing+Destination+Details)

Claim	US 8,943,500 Claim Term	Analysis
		Discovering Capacity Requirements TF Owned by Thomas Farley (Deactivated) ••• Mar 29, 2022 • 1 min read The Capacity Requirements window displays a summary of capacity information for discovered sources so you can plan appropriately for capacity required on destination servers. Click **Discover>Capacity Requirements**. The Capacity Requirements page is displayed. To view recommended sizing options for a dissolve-ready migration to the destination, click the plus icon for a selected source. To hide the options, click the icon again. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314671412/Discovering+Capacity+Requirements) Once applications are containerized using VirtaMove, "***backup copies of the containerized applications can be stored for recovery or distribution purposes***." VirtaMove stores backup copies of containerized applications, essentially copying the isolated environments to storage. This capability ensures that entire application environments, once isolated and containerized, can be replicated and stored for purposes like recovery, packaging or distribution. If containers—or containerized applications—are no longer required, they may be uninstalled—or deleted, as demonstrated above.

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/blog/solve-datacenter-management-problems/)

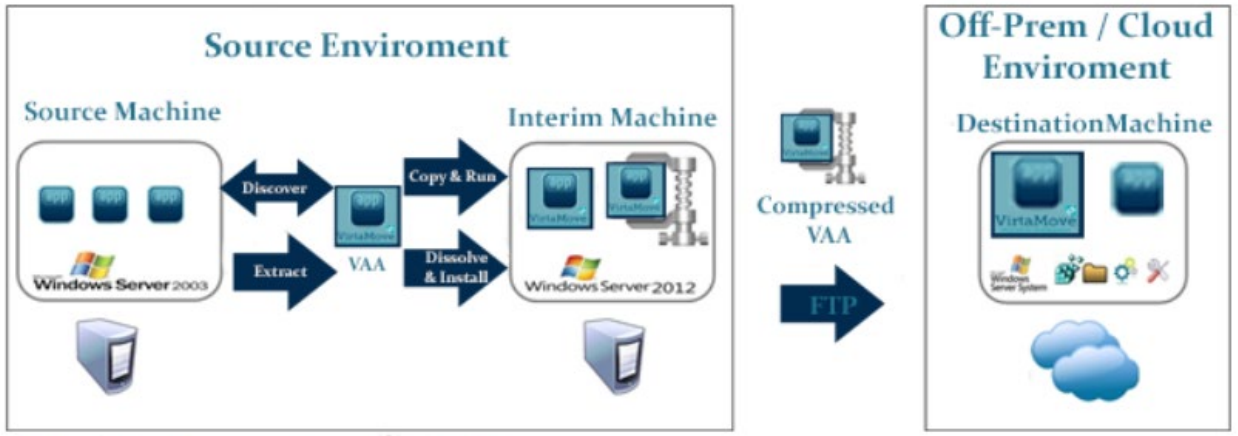
Claim	US 8,943,500 Claim Term	Analysis
		3. CONTAINERIZE AND ISOLATE APPLICATIONS *The problem:* In regulated businesses, customers need to modernize certified applications that are running on legacy operating systems so that they can enable these apps on a supported OS. In many industries, like Insurance, Healthcare, Pharmaceuticals, and Banking, customers must verify compliance of business applications to rigorous, auditable standards (HIPAA and HITECH, for example, are compliance standards in regulated Healthcare-related businesses). Once an application is certified, making changes requires a time consuming and expensive re-certification process. *The VirtaMove solution:* Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. **4. CREATE IDENTICAL APPLICATION IMAGES FOR TEST, DEVELOPMENT, OR BACKUP** *The problem:* Software development is a demanding business. Under pressure to meet deadlines, software developers might forget about the detailed installation scripts and configuration data required to create identical Cloud or Test copies of an application. Having identical Test and Development environments ensures that you've synchronized and are testing the current development version of software. Where identical development environments are not available, you're likely to see frequent problems with version and feature regression. Having a backup copy of both Development and Production instances is also critical for business continuity. *The VirtaMove solution:* VirtaMove containerizes applications. Containerization accelerates the development and testing of new software by making it easy to create identical copies of the software on both datacenter and Cloud servers, on newer OSs such as Windows Server 2008 R2 , WS2012, or WS2016. This eliminates the need to worry about recreating an installation process or scripts. It lets the developer focus on building software that solves business problems rather than worrying about the details of configuration. Using VirtaMove, applications containterized on WS2008 can run seamlessly on WS2012 or WS2016. Once applications are containerized, backup copies of the containerized applications can be stored for recovery or distribution purposes. The master copy of an application stored in a container can be used to create a fresh, uncluttered installation of an application, free of malware or other exposures. (https://virtamove.com/blog/q-and-a/)

Claim	US 8,943,500 Claim Term	Analysis
		2. CREATE EXACT APPLICATION IMAGES FOR DEVELOPMENT Software development is a demanding business. Under pressure to meet deadlines, software developers may well forget about the detailed installation scripts and configuration data required to create identical cloud or test copies of an application. However, if applications are containerized, it's easy to create exact images on newer OSs such as Windows Server 2008 R2 or WS2012 or WS2016. This eliminates the need to worry about recreating an installation process or scripts. Additionally, applications that are containerized with VirtaMove on WS2008 can run seamlessly on WS2012 or WS2016. Containerization accelerates the development and testing of new software by making it easy to create identical copies of the software on both datacentre and cloud servers. It lets the developer focus on building software that solves business problems rather than worrying about the details of configuration. **3. STORE MASTER COPIES OF APPLICATIONS FOR RECOVERY PURPOSES** Once applications are containerized using VirtaMove, backup copies of the containerized applications can be stored for recovery or distribution purposes. The master copy of an application stored in a container can be used to create a fresh, decluttered installation of an application, free of malware or other exposures. *Isolate, replicate, and recover or distribute.* These are just three of the many benefits and uses of VirtaMove containers, which customers rely on every day. To learn more about other use cases or how VirtaMove can help accelerate and modernize your Windows Server infrastructure, please call or e-mail us. (https://virtamove.com/blog/not-just-app-modernization/)
8	The system according to claim 1, wherein the one or more isolated environments are stored on a networked storage and the one or more applications are delivered over a network.	The Accused Products comprise a system as claimed in claim 1. *See* claim 1. The Accused Products comprise a system, "wherein one or more isolated environments are stored on a networked storage and the one or more applications are delivered over a network." For example, the Accused Products able to transfer container files ("CAP files") to a Cloud environment.

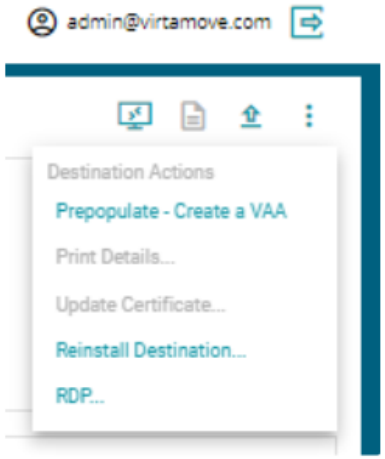
Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/blog/cloud-onboarding-with-virtamove-7-steps-to-success/) Storing of containers may occur either on "modern in-house servers *or on hybrid or public cloud environments*."

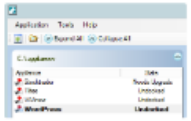
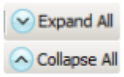
Claim	US 8,943,500 Claim Term	Analysis
		The new release of VirtaMove's award-winning application migration products V-Maestro, V-Monitor, and V-Migrate, moves your infrastructure forward with a stateful re-install of legacy server applications from WS2003, WS2008, WS2012, and WS2016 Server to new WS2019 servers (and within current Microsoft limitations, to Windows Containers on 2019). V-Migrate software automatically moves Windows-based applications from older to newer operating systems, on modern in-house servers or on hybrid or public cloud environments, including Microsoft Azure and Amazon AWS clouds. (https://www.prweb.com/releases/virtamove-v-migrate-now-supports-ws2019-and-windows-container-migrations-897804768.html) "*When using VirtaMove to migrate applications to the Cloud or to migrate applications off-premises, network latency can greatly increase the time it takes to copy files and perform registry changes*."

Claim	US 8,943,500 Claim Term	Analysis
		Network Latency and Migrations TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 25, 2022 • 4 min read When using VirtaMove to migrate applications to the Cloud or to migrate applications off-premises, network latency can greatly increase the time it takes to copy files and perform registry changes. Roundtrip latency mainly impacts Windows Remote Registry Protocol (MS-RRP), which is used to manipulate the Windows registry on the destination machine. If your scenario involves migrating applications on-premise to the Cloud or off-premises, and you are not sure about network latency between the source and destination machines, VirtaMove recommends that you test migration using a simple, small application, such as Notepad++. Notepad++ is 17 MB on disk and should take no more than 5 minutes to migrate from the source to the destination environment. If the migration takes longer than 5 minutes, you can be reasonably sure that there is latency somewhere in the network. Testing a simple, small application like Notepad++ in your environment will identify potential latency and allow you to determine approximately how long larger applications will take to migrate. It's important to set clear expectations concerning how long a migration is expected to take, for the sake of resource planning and coverage during the change management window. If latency is a known constraint in your environment, VirtaMove recommends that you use an interim server in a migration. Using an interim server provides the best strategy for migrating applications across high latency connections using VirtaMove. The interim server is provisioned with the operating system version of the intended destination machine, and placed in close proximity to the source server. The VirtaMove Tether and migration processes happen from the source server to the interim server. Then, the container is compressed and copied to the destination server off-premises. Once the compressed container has been copied successfully, it is uncompressed and finally dissolved onto the destination server, thus completing the migration. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310707083/Network+Latency+and+Migrations)

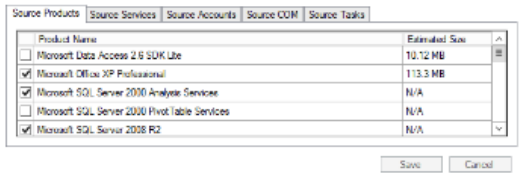
Claim	US 8,943,500 Claim Term	Analysis
		 *Migration Process using an Interim Server* Performing migrations using an interim server ensures that files and registry artifacts are copied with minimal latency; this saves a great deal of time during the pre-populate part of the migration and when you exercise the tethered application. Moving one larger file (a compressed container stored as a .cap file) is the optimal way to move the contained application(s). (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310707083/Network+Latency+and+Migrations)

Claim	US 8,943,500 Claim Term	Analysis
		The VirtaMove solution: Let's say that you want to move WS2000 or WS2003 applications to a private or public Cloud, but applications are currently running in a VM. You can incur the overhead of moving an exact image of a VM to the Cloud; however, the VM will be burdened with an outdated OS and new Cloud tools will not be available to you. The better approach? Move legacy applications to a native Cloud-supported OS like WS2008, WS2012, or WS2016 *as you do the Cloud migration*. This is called a staging approach to migration. Staging offers significant benefits: ▫ The application (whether standalone or tiered) can be tested/verified on a staging server before deploying it to the Cloud. ▫ The staging server can act as a cloned Test or Development environment. ▫ Updating the OS during Cloud onboarding closes security exposures. Via an intelligent agent, VirtaMove compresses and encrypts data transfer, which means faster and secure transfer for your data and application. Cloud onboarding allows for automated OS maintenance, provides the processing advantages of a clean install, and unlocks Cloud tools for managing and monitoring application performance. VirtaMove automates the migration of legacy applications to the public, private, or hybrid Cloud environment of your choice. If you need to change it up later, you can simply automate the migration of applications back to datacenter servers or to another Cloud environment, which means that you're never locked into a Cloud, VM, or OS version. (https://virtamove.com/blog/q-and-a/)
9	The system according to claim 1, wherein each of the one or more applications is installed into its own isolated environment.	The Accused Products comprise a system as claimed in claim 1. *See* claim 1. The Accused Products comprise a system, "wherein each of the one or more applications is installed into its own isolated environment." For example, through the Accused Products, multiple containers, each housing specific applications, may be created as part of the application migration process. **Running Multiple Containers** The `virtarun` command uses shared memory, which allows VirtaMove to reduce the amount of memory needed when running multiple containers. For example, if you run 10 containers, this does not mean that 10 times the amount of memory is being used.

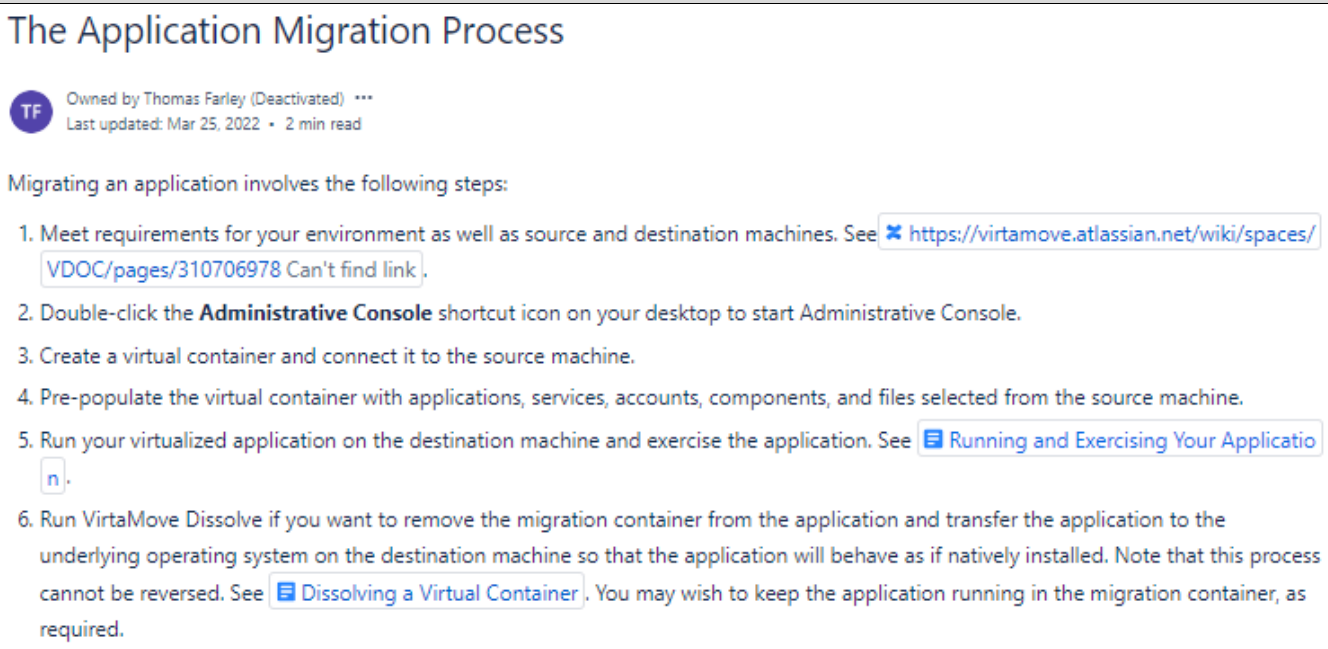
Claim	US 8,943,500 Claim Term	Analysis
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/313688121/Running+Containers) Step 2: Prepopulate a Container TF Owned by Thomas Farley (Deactivated) ••• Mar 29, 2022 • 1 min read Once the pre-migration Audit is complete, you can create a migration container and populate it with the application and its dependencies. V-Maestro will copy all dependencies into the container, such as user and group accounts and COM objects. Once this step is complete, V-Maestro will dock the container, which registers the container onto the operating system of the destination. To Create and Prepopulate a Container 1. In the Destination Details window, click the Actions icon at the top and select **Prepopulate - Create a VAA**.  2. Click **Continue** to confirm. You can check **Current Operation** in the **Migrations in-Progress** card to see the status of the prepopulation process. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314802710/Step+2+Prepopulate+a+Container)

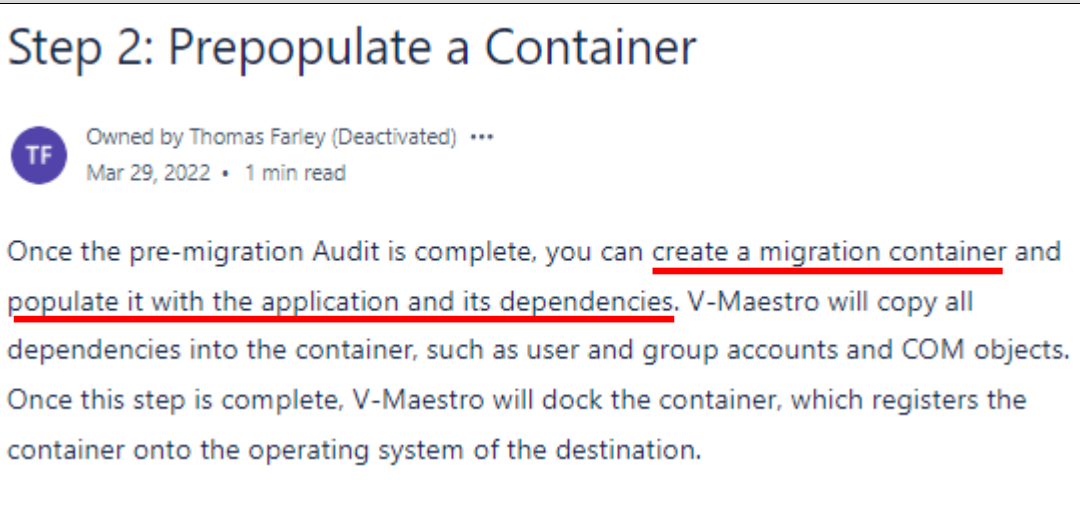
Claim	US 8,943,500 Claim Term	Analysis
		Viewing Containers TF Owned by Thomas Farley (Deactivated) ••• Last updated: Sept 02, 2022 • 3 min read You can view a list of containers and creation information for a container. View the list of containers displayed in the left side of the Administrative Console window.  You can use the following commands to manage the list: • Refresh the list • Expand or collapse the container locations in the list.  You can view information about the environment in which a container was created, such as the operating system and the VirtaMove software version. You can also view information about docked hosts. You can add or remove container locations in the view list, and change the default folder for containers. **Note:** Containers are not deleted from the source machine when you remove a container location from the list. For information about deleting containers, see Deleting Containers. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311231096/Viewing+Containers) The Accused Products discover and monitor multiple sources and applications. Each application and their components and dependencies may be pre-populated into their own distinct containers.

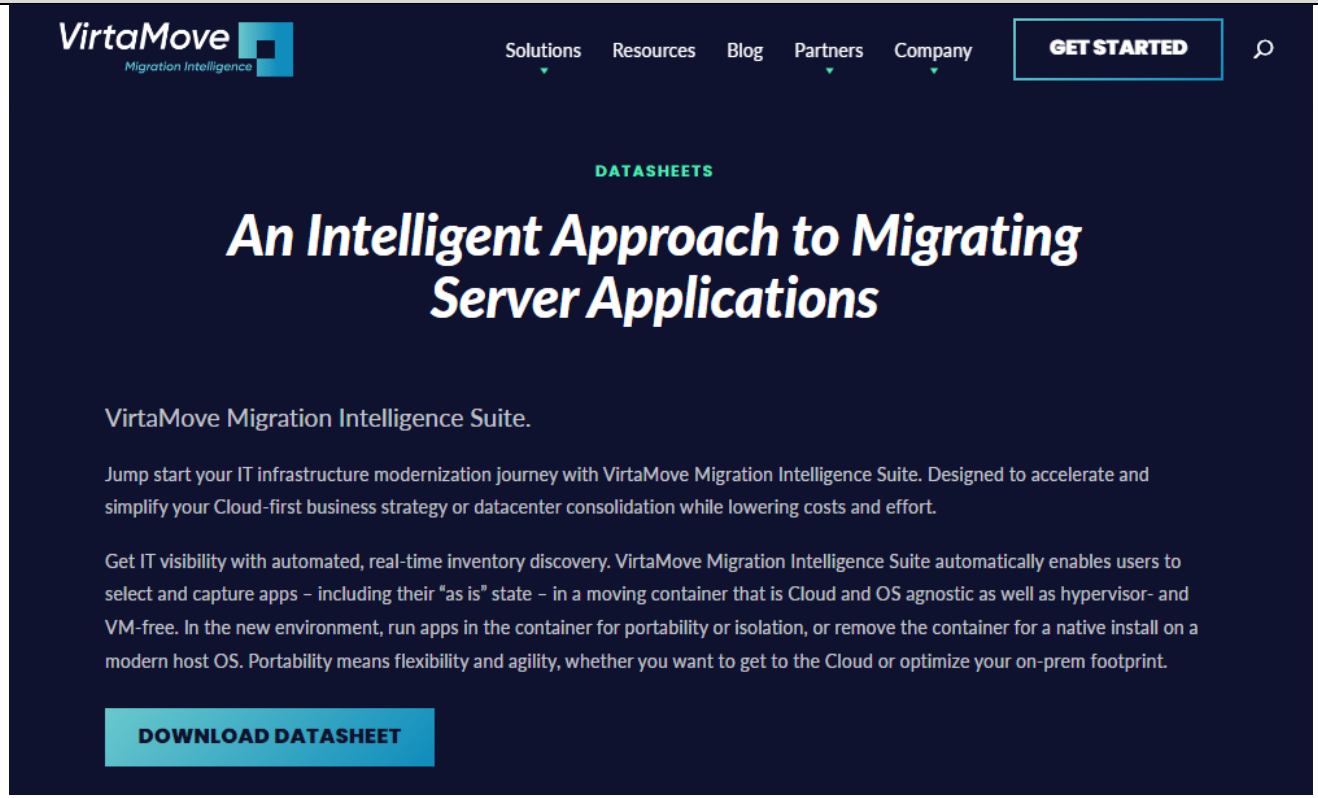
Claim	US 8,943,500 Claim Term	Analysis
		About Monitoring Applications TF Owned by Thomas Farley (Deactivated) ••• Mar 29, 2022 • 1 min read Monitoring discovered sources and the applications they are running lets you collect data about how and when these applications are used, in real time. It also discovers application components and dependencies that you might not be aware of, and how application components might be distributed across a network. Monitoring reduces the amount of time required to exercise the application on the destination, which therefore minimizes the duration of the maintenance window. After monitoring selected applications for a few days, you can decide how best to move them to selected destinations, or whether to even move them at all if they don't appear to be a priority for migration based on usage data. For example, applications with a monitoring status of No Usage may not be usefully moved. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314802606/About+Monitoring+Applications) Updating the VirtaMove Activation Code TF Owned by Thomas Farley (Deactivated) ••• Mar 03, 2022 • 1 min read You can update the activation code for your VirtaMove license in the Administrative Console. After you update the activation code, any subsequent containers connecting to the source machine associated with the activation code will not be prompted for activation. Connections to new source machines will use the default activation code. **Important:** Changing the default activation code will change the activation code for ALL containers. If you have multiple containers and you update the activation code, existing and new containers will now use the new activation code. This scenario might result in containers using an extra license allotment. To Update the Activation Code 1. Open the VirtaMove Administrative Console. 2. Select **Tools>Set Activation Code**. The Update Activation Codes window appears. 3. Enter the **Activation Code**, and then click **Apply**. 4. Click **Done**. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311394720/Updating+the+VirtaMove+Activation+Code)

Claim	US 8,943,500 Claim Term	Analysis
		Managing Source Products Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 28, 2022 • 2 min read 1. Select a container, and then click the **Tether** tab. 2. Optional. Click the **Use Tether** check box to enable Tether. 3. To test the connection to the source machine, click the **Test Connection** button. If credentials fail or pre-requisites have not been met for tethering, an error message is displayed. You can view the Audit Report in the installation directory to determine what the problem is. 4. Run an Audit of the source and destination machine by clicking the **Run Audit** button. If credentials fail or pre-requisites have not been met for tethering, an error message is displayed at the bottom of the Administrative Console window. To scroll through messages, click the Back or Forward button on the left or right of the message bar. You can view the Audit Report by going to the **Appliance Logs** tab to determine what the problem is. 5. Click the **Find Applications** button. VirtaMove retrieves all remote applications, services, and user/group account information and displays this information in the **Source Products** tab. 6. In the **Source Products** tab, review the list of source applications. 7. Select the product or products you want to migrate or de-select a product or products as appropriate. To select an IIS application, select **Web Server (IIS)**. Before you attempt to migrate an IIS application, complete pre-requisites for IIS application migration. For information about pre-requisites and how to migrate an IIS application, see the Application Migration Guide. When you click away from the list in the **Source Products** tab, VirtaMove Tether automatically selects all user/group accounts, services, and executables associated with the installed application and displays these in the **Source Services** and **Source Accounts** tabs.  8. Click the **Pre-Populate** button to migrate source products, services, users, and groups. If you have not yet activated your VirtaMove license key, you will now be prompted to do so. See Activating Your VirtaMove License for information. Note that the **Pre-Populate** portion process may take some time. A window displays the status of the Pre-Populate process. You can cancel the process by closing the window at the top right of the window. Click the **Close** button to close the window when the process is complete. 9. To start the selected application, click **Dock** button and then click the **Launch Application** button once the container is successfully docked. 10. Click **Save.** (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311427775/Managing+Source+Products)
10	The system according to claim 1, wherein two or more applications are	The Accused Products comprise a system as claimed in claim 1. *See* claim 1. The Accused Products comprise a system, "wherein two or more applications are installed into a shared isolated environment."

Claim	US 8,943,500 Claim Term	Analysis
	installed into a shared isolated environment.	For example, the Accused Products "isolate applications." Specifically, the Accused Products "create a virtual container" and "[p]re-populate the virtual container with *applications, services, accounts, components, and files* selected from the source machine." (https://virtamove.com/blog/not-just-app-modernization/)

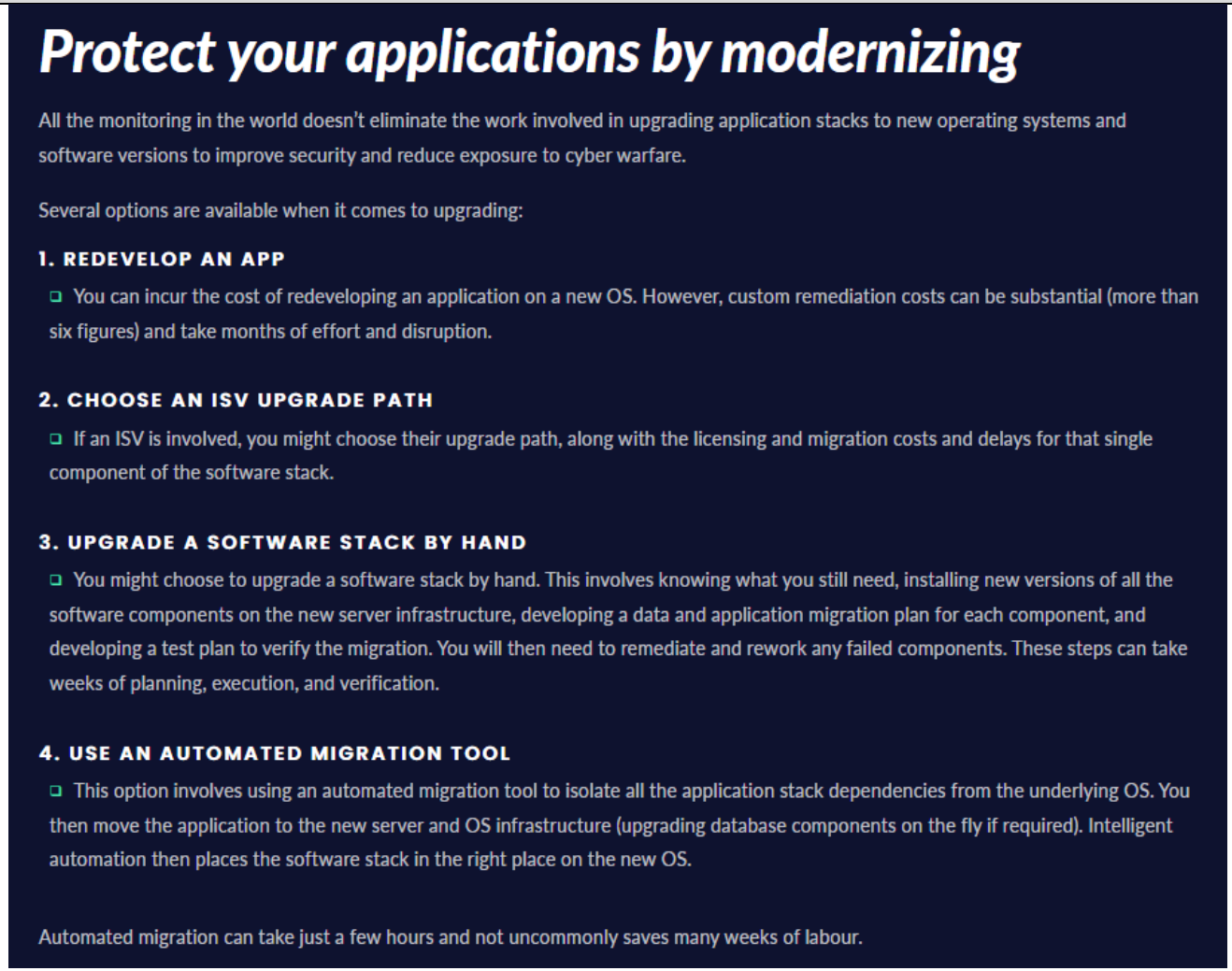
Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310739347/The+Application+Migration+Process)

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314802710/Step+2+Prepopulate+a+Container) Additional evidence showing VirtaMove's infringement is found in at least the following documents:

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/resources/an-intelligent-approach-to-migrating-server-applications/)

Claim	US 8,943,500 Claim Term	Analysis
		3. CONTAINERIZE AND ISOLATE APPLICATIONS *The problem:* In regulated businesses, customers need to modernize certified applications that are running on legacy operating systems so that they can enable these apps on a supported OS. In many industries, like Insurance, Healthcare, Pharmaceuticals, and Banking, customers must verify compliance of business applications to rigorous, auditable standards (HIPAA and HITECH, for example, are compliance standards in regulated Healthcare-related businesses). Once an application is certified, making changes requires a time consuming and expensive re-certification process. *The VirtaMove solution:* Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. (https://virtamove.com/blog/q-and-a/)

Claim	US 8,943,500 Claim Term	Analysis



Protect your applications by modernizing

All the monitoring in the world doesn't eliminate the work involved in upgrading application stacks to new operating systems and software versions to improve security and reduce exposure to cyber warfare.

Several options are available when it comes to upgrading:

1. REDEVELOP AN APP

- You can incur the cost of redeveloping an application on a new OS. However, custom remediation costs can be substantial (more than six figures) and take months of effort and disruption.

2. CHOOSE AN ISV UPGRADE PATH

- If an ISV is involved, you might choose their upgrade path, along with the licensing and migration costs and delays for that single component of the software stack.

3. UPGRADE A SOFTWARE STACK BY HAND

- You might choose to upgrade a software stack by hand. This involves knowing what you still need, installing new versions of all the software components on the new server infrastructure, developing a data and application migration plan for each component, and developing a test plan to verify the migration. You will then need to remediate and rework any failed components. These steps can take weeks of planning, execution, and verification.

4. USE AN AUTOMATED MIGRATION TOOL

- This option involves using an automated migration tool to isolate all the application stack dependencies from the underlying OS. You then move the application to the new server and OS infrastructure (upgrading database components on the fly if required). Intelligent automation then places the software stack in the right place on the new OS.

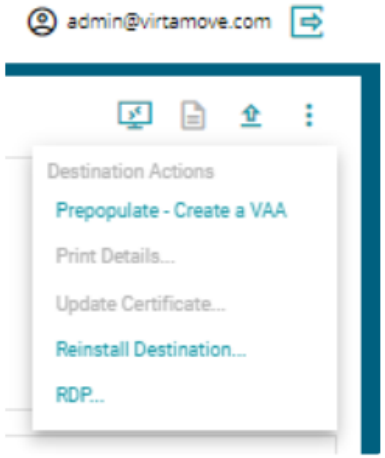
Automated migration can take just a few hours and not uncommonly saves many weeks of labour.

(https://virtamove.com/blog/cyber-warfare-again/)

Claim	US 8,943,500 Claim Term	Analysis
		The VirtaMove solution: Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. (https://virtamove.com/blog/q-and-a/) *"Your server may have external server dependencies that need to be taken into consideration.* These are indicated by port connections and data flow of this dotted line. The dotted line tells us the servers are connected in some way. In this instance, it tells us they have a relationship and we should dig down to find out if these are the same applications or perhaps a back-end database service. *This is valuable information in terms of deciding when migrating one of these application layers, there may be a knock-on effect on additional servers and infrastructure layers.* It lets you plan how to address multi-tier applications. You may need to move one, two or all three of the apps and servers at same time … *The dotted line might simply indicate desktop users or [there] may be other computers or servers that have database components associated with this application in some fashion."*

Claim	US 8,943,500 Claim Term	Analysis
		 (https://www.youtube.com/watch?v=nOlMUwHMvY0&t=274s)

Claim	US 8,943,500 Claim Term	Analysis
11	The system according to claim 10, wherein the two or more applications share resources inside the shared isolated environment.	The Accused Products comprise a system as claimed in claim 10. *See* claim 10. The Accused Products comprise a system, "wherein the two or more applications share resources inside the shared isolated environment." For example, the Accused Products "create a virtual container" and "[p]re-populate the virtual container with *applications, services, accounts, components, and files* selected from the source machine." The Application Migration Process TF Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 25, 2022 • 2 min read Migrating an application involves the following steps: 1. Meet requirements for your environment as well as source and destination machines. See https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310706978 Can't find link. 2. Double-click the **Administrative Console** shortcut icon on your desktop to start Administrative Console. 3. Create a virtual container and connect it to the source machine. 4. Pre-populate the virtual container with applications, services, accounts, components, and files selected from the source machine. 5. Run your virtualized application on the destination machine and exercise the application. See Running and Exercising Your Application. 6. Run VirtaMove Dissolve if you want to remove the migration container from the application and transfer the application to the underlying operating system on the destination machine so that the application will behave as if natively installed. Note that this process cannot be reversed. See Dissolving a Virtual Container. You may wish to keep the application running in the migration container, as required. Pre-Populate Pre-populating a container is part of the VirtaMove application migration process. Pre-population migrates remote products, services, users, and groups without requiring downtime of the application on the source server. Any locked files will not be copied over until the application is fully exercised. Pre-populate captures components of the application while the application is up and running on the source server. You can then schedule a maintenance window at a later time for the application. It is during this maintenance window that you would stop and shut down the application before you complete the migration by exercising the application. Pre-populate occurs when you click the **Pre-Populate** button in the VirtaMove Administrative Console under the **Tether** tab. A window displays the status of the Pre-Populate process. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/310739347/The+Application+Migration+Process)

Claim	US 8,943,500 Claim Term	Analysis
		Step 2: Prepopulate a Container Owned by Thomas Farley (Deactivated) ••• Mar 29, 2022 • 1 min read Once the pre-migration Audit is complete, you can create a migration container and populate it with the application and its dependencies. V-Maestro will copy all dependencies into the container, such as user and group accounts and COM objects. Once this step is complete, V-Maestro will dock the container, which registers the container onto the operating system of the destination. To Create and Prepopulate a Container 1. In the Destination Details window, click the Actions icon at the top and select **Prepopulate - Create a VAA**.  2. Click **Continue** to confirm. You can check **Current Operation** in the **Migrations in-Progress** card to see the status of the prepopulation process. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314802710/Step+2+Prepopulate+a+Container)

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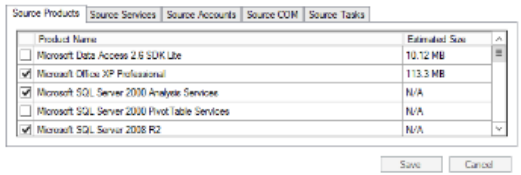
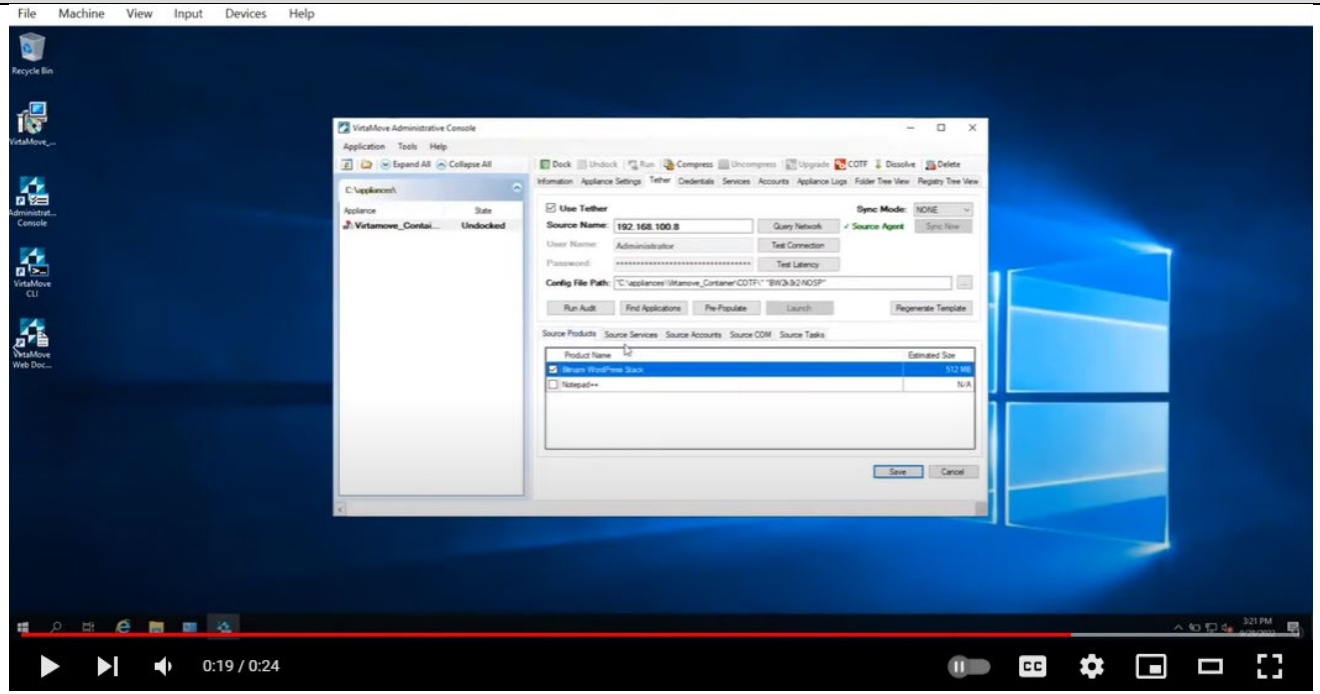
		About Monitoring Applications TF Owned by Thomas Farley (Deactivated) ••• Mar 29, 2022 • 1 min read Monitoring discovered sources and the applications they are running lets you collect data about how and when these applications are used, in real time. It also discovers application components and dependencies that you might not be aware of, and how application components might be distributed across a network. Monitoring reduces the amount of time required to exercise the application on the destination, which therefore minimizes the duration of the maintenance window. After monitoring selected applications for a few days, you can decide how best to move them to selected destinations, or whether to even move them at all if they don't appear to be a priority for migration based on usage data. For example, applications with a monitoring status of No Usage may not be usefully moved. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314802606/About+Monitoring+Applications)

Claim	US 8,943,500 Claim Term	Analysis
		Managing Source Products Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 28, 2022 • 2 min read 1. Select a container, and then click the **Tether** tab. 2. Optional. Click the **Use Tether** check box to enable Tether. 3. To test the connection to the source machine, click the **Test Connection** button. If credentials fail or pre-requisites have not been met for tethering, an error message is displayed. You can view the Audit Report in the installation directory to determine what the problem is. 4. Run an Audit of the source and destination machine by clicking the **Run Audit** button. If credentials fail or pre-requisites have not been met for tethering, an error message is displayed at the bottom of the Administrative Console window. To scroll through messages, click the Back or Forward button on the left or right of the message bar. You can view the Audit Report by going to the **Appliance Logs** tab to determine what the problem is. 5. Click the **Find Applications** button. VirtaMove retrieves all remote applications, services, and user/group account information and displays this information in the **Source Products** tab. 6. In the **Source Products** tab, review the list of source applications. 7. Select the product or products you want to migrate or de-select a product or products as appropriate. To select an IIS application, select **Web Server (IIS)**. Before you attempt to migrate an IIS application, complete pre-requisites for IIS application migration. For information about pre-requisites and how to migrate an IIS application, see the Application Migration Guide. When you click away from the list in the **Source Products** tab, VirtaMove Tether automatically selects all user/group accounts, services, and executables associated with the installed application and displays these in the **Source Services** and **Source Accounts** tabs.  8. Click the **Pre-Populate** button to migrate source products, services, users, and groups. If you have not yet activated your VirtaMove license key, you will now be prompted to do so. See Activating Your VirtaMove License for information. Note that the **Pre-Populate** portion process may take some time. A window displays the status of the Pre-Populate process. You can cancel the process by closing the window at the top right of the window. Click the **Close** button to close the window when the process is complete. 9. To start the selected application, click **Dock** button and then click the **Launch Application** button once the container is successfully docked. 10. Click **Save.** (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311427775/Managing+Source+Products) "We can go through the list of applications and select the ones we want to bring over."

Claim	US 8,943,500 Claim Term	Analysis
		 (https://www.youtube.com/watch?v=FvS88KEERwA) *"Your server may have external server dependencies that need to be taken into consideration.* These are indicated by port connections and data flow of this dotted line. The dotted line tells us the servers are connected in some way. In this instance, it tells us they have a relationship and we should dig down to find out if these are the same applications or perhaps a back-end database service. *This is valuable information in terms of deciding when migrating one of these application layers, there may be a knock-on effect on additional servers and infrastructure layers.* It lets you plan how to address multi-tier applications. You may need to move one, two or all three of the apps and servers at same time … *The dotted line might simply indicate desktop users or [there] may be other computers or servers that have database components associated with this application in some fashion."*

Claim	US 8,943,500 Claim Term	Analysis
		 (https://www.youtube.com/watch?v=nOlMUwHMvY0&t=274s)

Claim	US 8,943,500 Claim Term	Analysis
		Migrating Folders, Shared Folders, and Registries TF Owned by Thomas Farley (Deactivated) ··· Mar 04, 2022 • 3 min read Using the Tree View feature, you can select folders and registries that you want to add to the tethering process and copy them over to the destination machine during the migration progress. You can also select which shared folders you want to set up on the destination machine. For information about shared folders, see About Shared Folders. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311394835/Migrating+Folders+Shared+Folders+and+Registries) 10. Select the directories, shared folders, and registry keys you want to tether and then click **Save** on each respective tab. Note that these files are added to the container and cannot be unselected or removed from the container after you click **Save**. If you click the **Scan Files** or **Scan Registry** button again, the feature will search the source machine and migrated registry hives again. Any detected changes will be applied to the tree views. If you want to add more nodes to the migration process, you can select and save nodes that are displayed in black font. Node trees persist, so if you switch containers or close the Administrative Console and return to the Tree View tabs later, the data will still be available. 11. Click the **Tether** tab and then click **Pre-Populate**. The saved directories, shared folders, and registry keys, as well any selected products, services, users, etc..., are migrated to the destination machine. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311394835/Migrating+Folders+Shared+Folders+and+Registries) Additional evidence showing VirtaMove's infringement is found in at least the following documents:

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		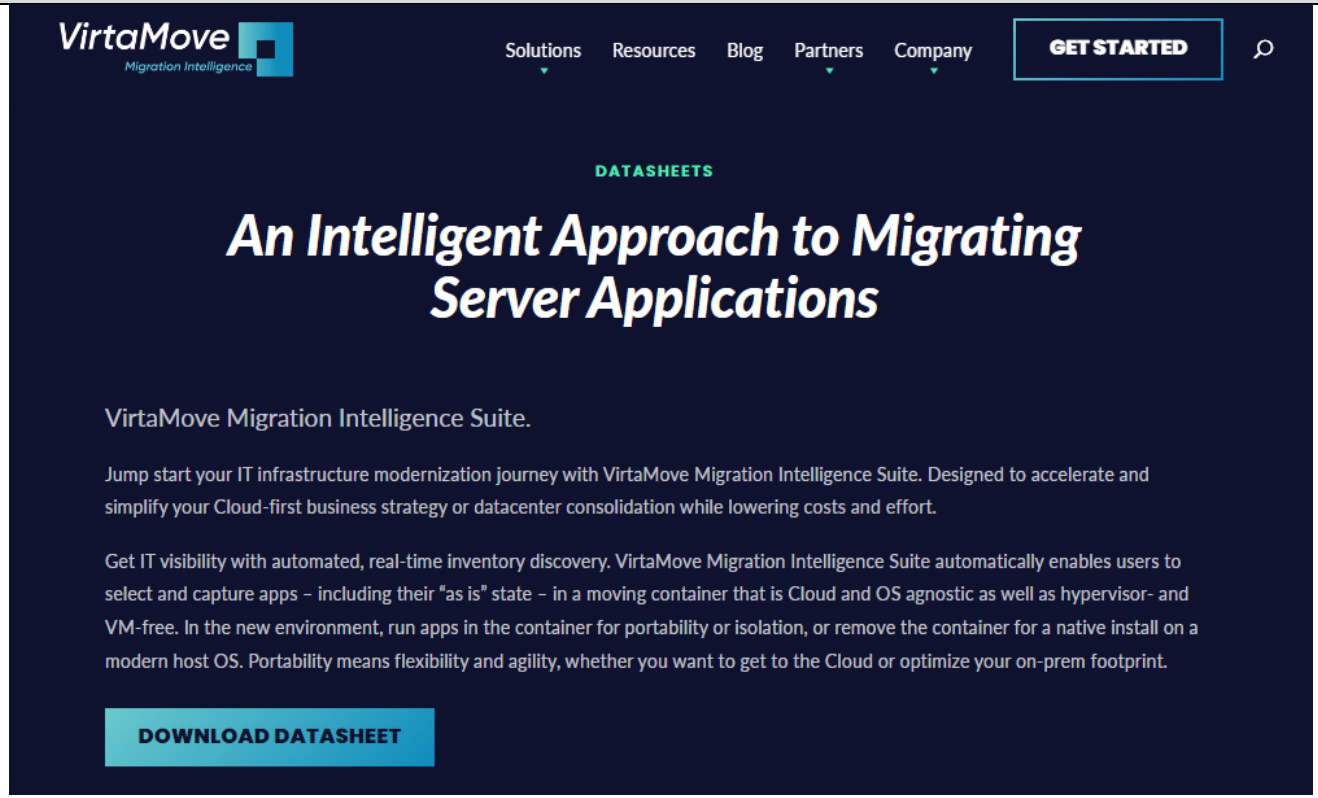 (https://virtamove.com/resources/an-intelligent-approach-to-migrating-server-applications/)

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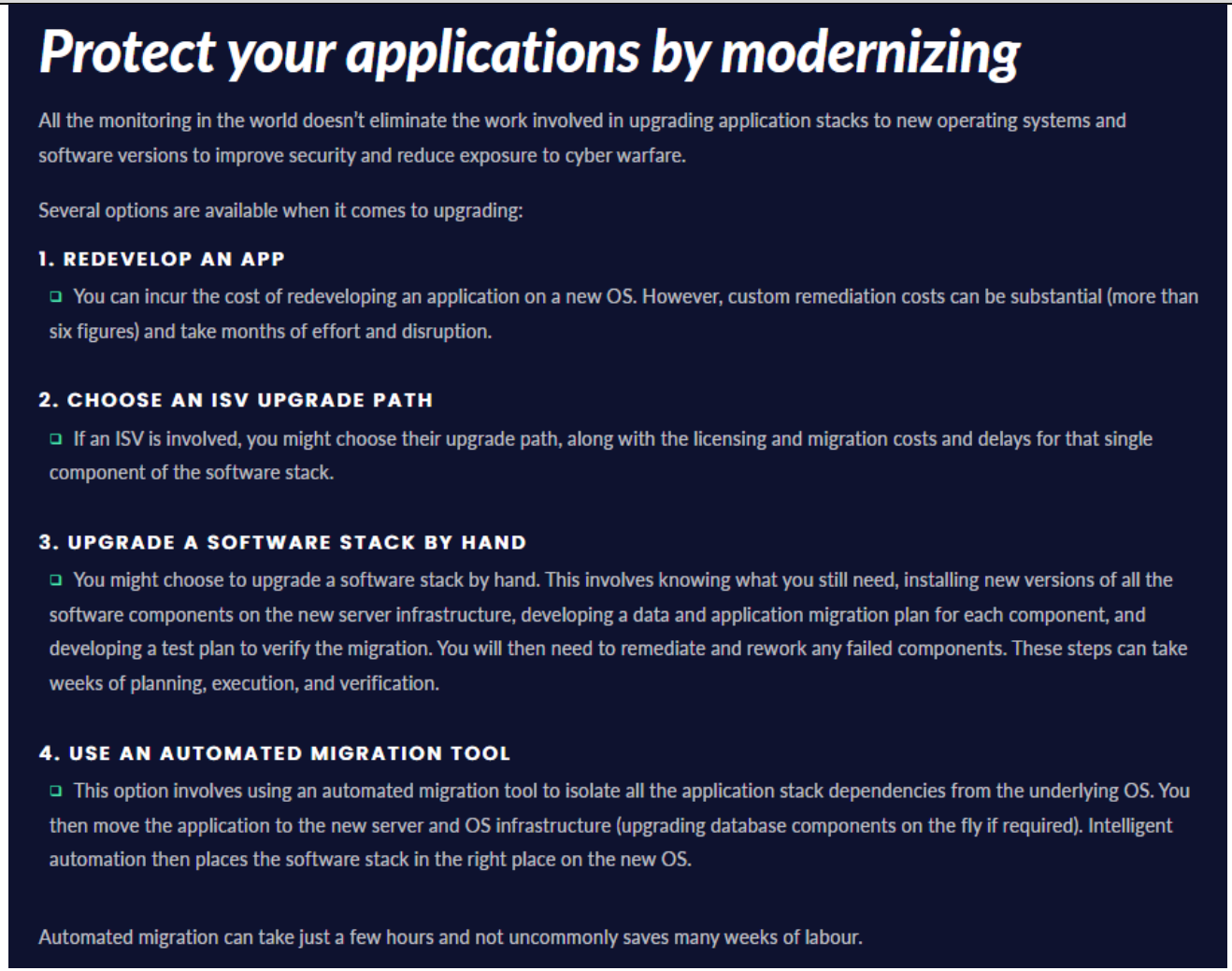

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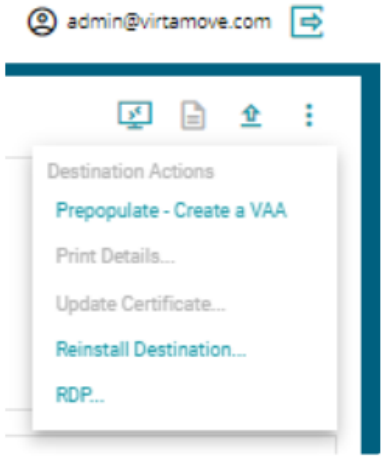
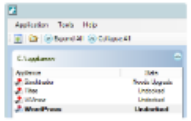
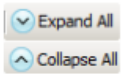
Claim	US 8,943,500 Claim Term	Analysis
		The VirtaMove solution: Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. (https://virtamove.com/blog/q-and-a/)
12	The system according to claim 1, wherein two or more applications are installed into separate isolated environments and the one or more applications run concurrently in the separate isolated environments.	The Accused Products comprise a system as claimed in claim 1. *See* claim 1. The Accused Products comprise a system, "wherein two or more applications are installed into separate isolated environments and the one or more applications run concurrently in the separate isolated environments." For example, through the Accused Products, multiple containers, each housing specific applications, may be created as part of migration. These containers are able to run concurrently on the destination machine/server. **Running Multiple Containers** The virtarun command uses shared memory, which allows VirtaMove to reduce the amount of memory needed when running multiple containers. For example, if you run 10 containers, this does not mean that 10 times the amount of memory is being used. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/313688121/Running+Containers)

Claim	US 8,943,500 Claim Term	Analysis
		Step 2: Prepopulate a Container TF Owned by Thomas Farley (Deactivated) ••• Mar 29, 2022 • 1 min read Once the pre-migration Audit is complete, you can create a migration container and populate it with the application and its dependencies. V-Maestro will copy all dependencies into the container, such as user and group accounts and COM objects. Once this step is complete, V-Maestro will dock the container, which registers the container onto the operating system of the destination. To Create and Prepopulate a Container 1. In the Destination Details window, click the Actions icon at the top and select **Prepopulate - Create a VAA**.  2. Click **Continue** to confirm. You can check **Current Operation** in the **Migrations in-Progress** card to see the status of the prepopulation process. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314802710/Step+2+Prepopulate+a+Container)

Claim	US 8,943,500 Claim Term	Analysis
		Viewing Containers TF Owned by Thomas Farley (Deactivated) ••• Last updated: Sept 02, 2022 • 3 min read You can view a list of containers and creation information for a container. View the list of containers displayed in the left side of the Administrative Console window.  You can use the following commands to manage the list: • Refresh the list • Expand or collapse the container locations in the list.  You can view information about the environment in which a container was created, such as the operating system and the VirtaMove software version. You can also view information about docked hosts. You can add or remove container locations in the view list, and change the default folder for containers. **Note:** Containers are not deleted from the source machine when you remove a container location from the list. For information about deleting containers, see Deleting Containers. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311231096/Viewing+Containers) The Accused Products discover and monitor multiple sources and applications. Each application and their components and dependencies may be pre-populated into their own distinct containers.

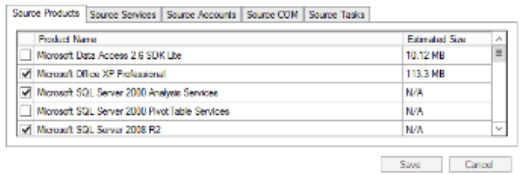
Claim	US 8,943,500 Claim Term	Analysis
		About Monitoring Applications TF Owned by Thomas Farley (Deactivated) ••• Mar 29, 2022 • 1 min read Monitoring discovered sources and the applications they are running lets you collect data about how and when these applications are used, in real time. It also discovers application components and dependencies that you might not be aware of, and how application components might be distributed across a network. Monitoring reduces the amount of time required to exercise the application on the destination, which therefore minimizes the duration of the maintenance window. After monitoring selected applications for a few days, you can decide how best to move them to selected destinations, or whether to even move them at all if they don't appear to be a priority for migration based on usage data. For example, applications with a monitoring status of No Usage may not be usefully moved. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314802606/About+Monitoring+Applications)

Claim	US 8,943,500 Claim Term	Analysis

Managing Source Products

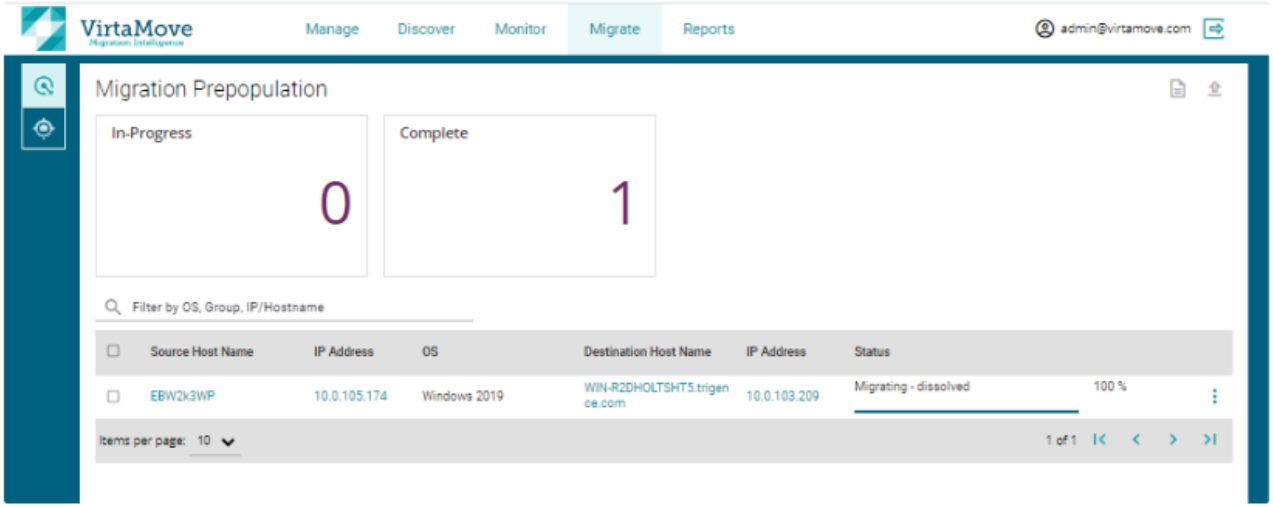
Owned by Thomas Farley (Deactivated) •••
Last updated: Mar 28, 2022 • 2 min read

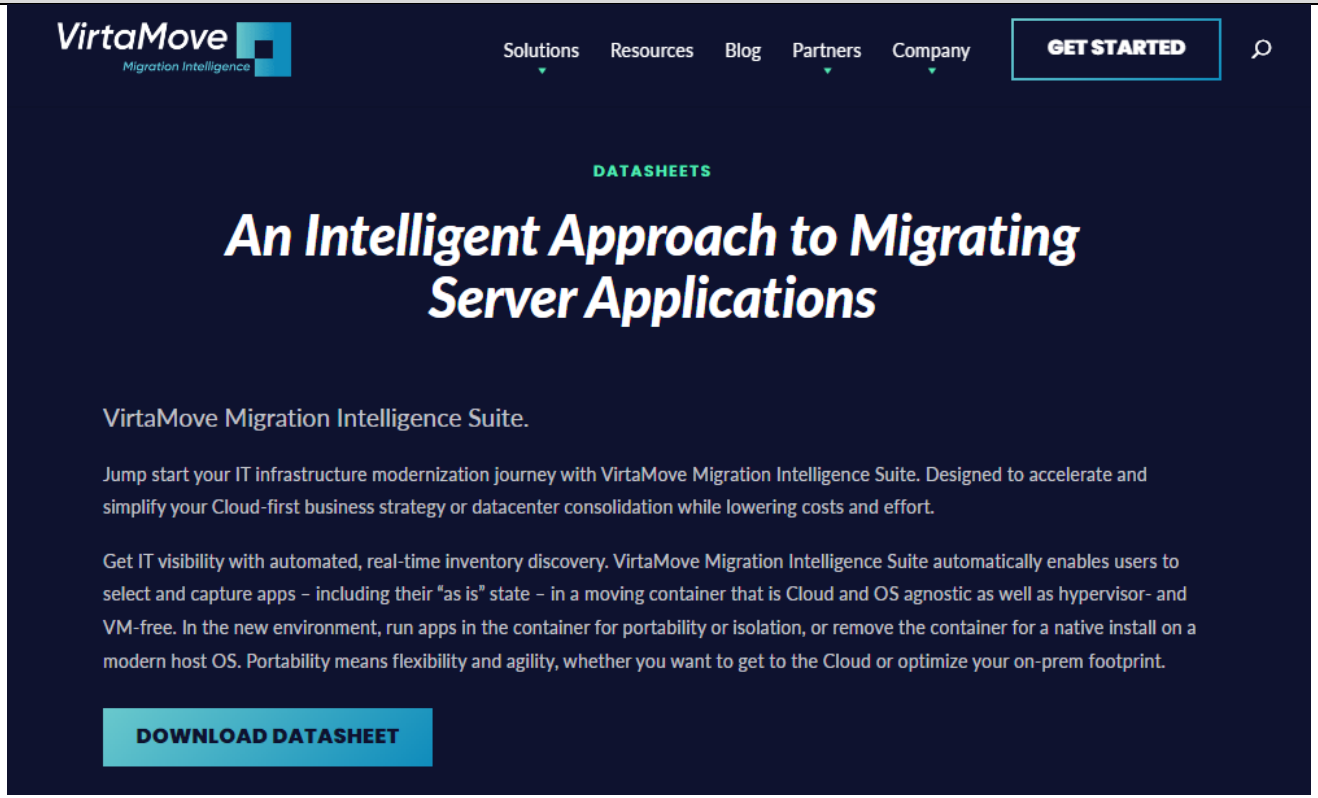
1. Select a container, and then click the **Tether** tab.
2. Optional. Click the **Use Tether** check box to enable Tether.
3. To test the connection to the source machine, click the **Test Connection** button. If credentials fail or pre-requisites have not been met for tethering, an error message is displayed. You can view the Audit Report in the installation directory to determine what the problem is.
4. Run an Audit of the source and destination machine by clicking the **Run Audit** button. If credentials fail or pre-requisites have not been met for tethering, an error message is displayed at the bottom of the Administrative Console window. To scroll through messages, click the Back or Forward button on the left or right of the message bar. You can view the Audit Report by going to the **Appliance Logs** tab to determine what the problem is.
5. Click the **Find Applications** button. VirtaMove retrieves all remote applications, services, and user/group account information and displays this information in the **Source Products** tab.
6. In the **Source Products** tab, review the list of source applications.
7. Select the product or products you want to migrate or de-select a product or products as appropriate. To select an IIS application, select **Web Server (IIS)**. Before you attempt to migrate an IIS application, complete pre-requisites for IIS application migration. For information about pre-requisites and how to migrate an IIS application, see the Application Migration Guide. When you click away from the list in the **Source Products** tab, VirtaMove Tether automatically selects all user/group accounts, services, and executables associated with the installed application and displays these in the **Source Services** and **Source Accounts** tabs.



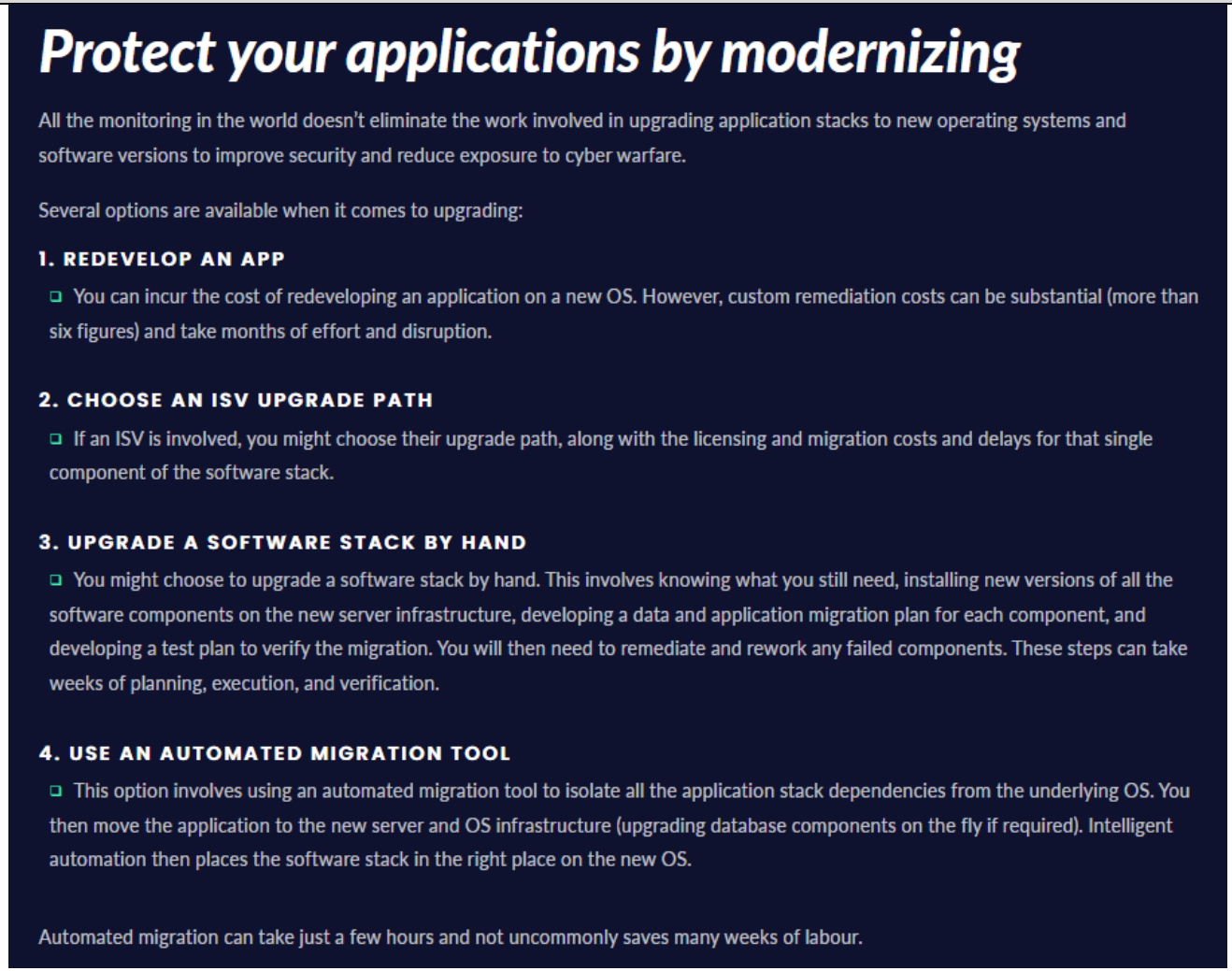
8. Click the **Pre-Populate** button to migrate source products, services, users, and groups. If you have not yet activated your VirtaMove license key, you will now be prompted to do so. See Activating Your VirtaMove License for information. Note that the **Pre-Populate** portion process may take some time. A window displays the status of the Pre-Populate process. You can cancel the process by closing the window at the top right of the window. Click the **Close** button to close the window when the process is complete.
9. To start the selected application, click **Dock** button and then click the **Launch Application** button once the container is successfully docked.
10. Click **Save.**

(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/311427775/Managing+Source+Products)

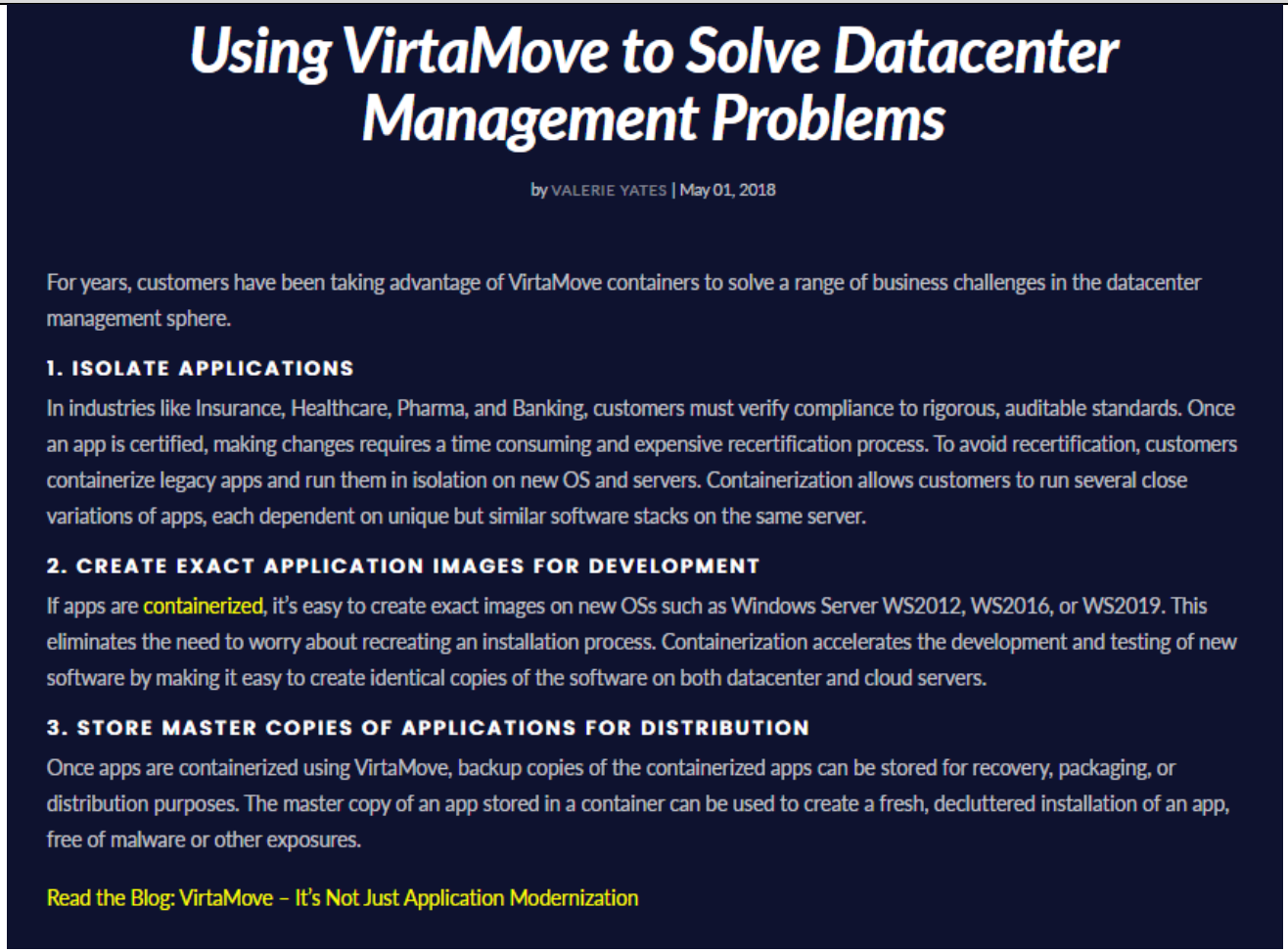
Claim	US 8,943,500 Claim Term	Analysis
		Viewing Overall Migration Information Owned by Thomas Farley (Deactivated) ••• Mar 29, 2022 • 1 min read If you are performing concurrent migrations from several sources, you can view overall migration information. This is a good way to get a quick snapshot view of migrations, without the details about the latest operations in the Destination Details window.  To View Overall Migration Information Click **Migrate**. The Migration Prepopulation window is displayed. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314671722/Viewing+Overall+Migration+Information) Additional evidence showing VirtaMove's infringement is found in at least the following documents:

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/resources/an-intelligent-approach-to-migrating-server-applications/)

Claim	US 8,943,500 Claim Term	Analysis
		3. CONTAINERIZE AND ISOLATE APPLICATIONS *The problem:* In regulated businesses, customers need to modernize certified applications that are running on legacy operating systems so that they can enable these apps on a supported OS. In many industries, like Insurance, Healthcare, Pharmaceuticals, and Banking, customers must verify compliance of business applications to rigorous, auditable standards (HIPAA and HITECH, for example, are compliance standards in regulated Healthcare-related businesses). Once an application is certified, making changes requires a time consuming and expensive re-certification process. *The VirtaMove solution:* Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. (https://virtamove.com/blog/q-and-a/)

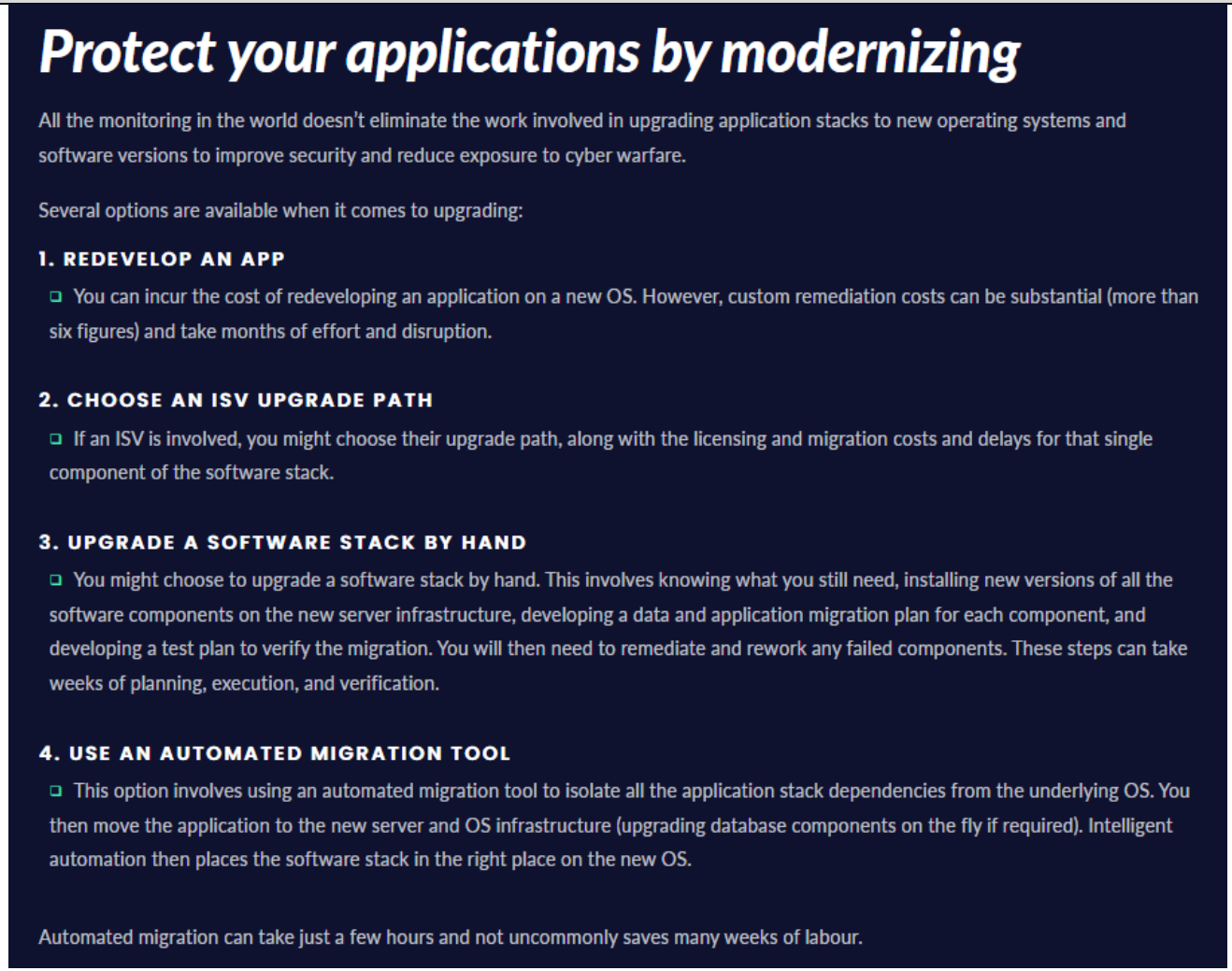
Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/blog/cyber-warfare-again/)

Claim	US 8,943,500 Claim Term	Analysis
		The VirtaMove solution: Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. (https://virtamove.com/blog/q-and-a/) **Running Multiple Containers** The `virtarun` command uses shared memory, which allows VirtaMove to reduce the amount of memory needed when running multiple containers. For example, if you run 10 containers, this does not mean that 10 times the amount of memory is being used. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/313688121/Running+Containers)
13	The system according to claim 1, wherein a first application of the one or more applications is installed twice into separate isolated environments, and the separate isolated environments run concurrently and independently.	The Accused Products comprise a system as claimed in claim 1. *See* claim 1. The Accused Products comprise a system, "wherein a first application of the one or more applications is installed twice into separate isolated environments, and the separate isolated environments run concurrently and independently." For example, "backup copies of the containerized applications can be stored for recovery or distribution purposes." Thus, once an application is containerized, that same application may be recovered and added into another separate container. The resulting containers can then run concurrently and independently.

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/blog/solve-datacenter-management-problems/)

Claim	US 8,943,500 Claim Term	Analysis
		3. CONTAINERIZE AND ISOLATE APPLICATIONS *The problem:* In regulated businesses, customers need to modernize certified applications that are running on legacy operating systems so that they can enable these apps on a supported OS. In many industries, like Insurance, Healthcare, Pharmaceuticals, and Banking, customers must verify compliance of business applications to rigorous, auditable standards (HIPAA and HITECH, for example, are compliance standards in regulated Healthcare-related businesses). Once an application is certified, making changes requires a time consuming and expensive re-certification process. *The VirtaMove solution:* Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. **4. CREATE IDENTICAL APPLICATION IMAGES FOR TEST, DEVELOPMENT, OR BACKUP** *The problem:* Software development is a demanding business. Under pressure to meet deadlines, software developers might forget about the detailed installation scripts and configuration data required to create identical Cloud or Test copies of an application. Having identical Test and Development environments ensures that you've synchronized and are testing the current development version of software. Where identical development environments are not available, you're likely to see frequent problems with version and feature regression. Having a backup copy of both Development and Production instances is also critical for business continuity. *The VirtaMove solution:* VirtaMove containerizes applications. Containerization accelerates the development and testing of new software by making it easy to create identical copies of the software on both datacenter and Cloud servers, on newer OSs such as Windows Server 2008 R2 , WS2012, or WS2016. This eliminates the need to worry about recreating an installation process or scripts. It lets the developer focus on building software that solves business problems rather than worrying about the details of configuration. Using VirtaMove, applications containterized on WS2008 can run seamlessly on WS2012 or WS2016. Once applications are containerized, backup copies of the containerized applications can be stored for recovery or distribution purposes. The master copy of an application stored in a container can be used to create a fresh, uncluttered installation of an application, free of malware or other exposures. (https://virtamove.com/blog/q-and-a/)

Claim	US 8,943,500 Claim Term	Analysis
		2. CREATE EXACT APPLICATION IMAGES FOR DEVELOPMENT Software development is a demanding business. Under pressure to meet deadlines, software developers may well forget about the detailed installation scripts and configuration data required to create identical cloud or test copies of an application. However, if applications are containerized, it's easy to create exact images on newer OSs such as Windows Server 2008 R2 or WS2012 or WS2016. This eliminates the need to worry about recreating an installation process or scripts. Additionally, applications that are containerized with VirtaMove on WS2008 can run seamlessly on WS2012 or WS2016. Containerization accelerates the development and testing of new software by making it easy to create identical copies of the software on both datacentre and cloud servers. It lets the developer focus on building software that solves business problems rather than worrying about the details of configuration. **3. STORE MASTER COPIES OF APPLICATIONS FOR RECOVERY PURPOSES** Once applications are containerized using VirtaMove, backup copies of the containerized applications can be stored for recovery or distribution purposes. The master copy of an application stored in a container can be used to create a fresh, decluttered installation of an application, free of malware or other exposures. *Isolate, replicate, and recover or distribute.* These are just three of the many benefits and uses of VirtaMove containers, which customers rely on every day. To learn more about other use cases or how VirtaMove can help accelerate and modernize your Windows Server infrastructure, please call or e-mail us. (https://virtamove.com/blog/not-just-app-modernization/)

Claim	US 8,943,500 Claim Term	Analysis
		 (https://virtamove.com/blog/cyber-warfare-again/)

Claim	US 8,943,500 Claim Term	Analysis
		The VirtaMove solution: Avoid the pain of re-certification by using VirtaMove to containerize legacy applications and run them in isolation on modern OS and server environments. Containerization allows customers to run several close variations of applications, each dependent on unique but similar software stacks on the same server. The isolation provided by VirtaMove containers avoids conflicts between different stacks (for example, database and driver variations) and eliminates the need to manage multiple servers and license multiple OS platforms for each application. In addition, security and performance are improved by virtue of running on a modern server platform. (https://virtamove.com/blog/q-and-a/) Additional evidence showing VirtaMove's infringement is found in at least the following documents: **To Delete and Recreate a Container** 1. Undock the container using the virtaundock command. 2. Do one of the following: a. Create a backup copy of the container template. Delete the container and then make the necessary changes to the template and use the vir tacreate /T command to recreate the container. b. Delete the container and start over. 3. Dock, start the container's services (if required), and run the container to confirm the changes have been made. You can repeat any of these actions as often as required until a container satisfies your requirements. (https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314114051/Testing+Containers)

Claim	US 8,943,500 Claim Term	Analysis

		virtacreate
		Owned by Thomas Farley (Deactivated) ••• Last updated: Mar 28, 2022 • 1 min read
		This command creates or updates a container. Administrator privileges are required.
		You cannot create a container if shortnames are disabled (if `NtfsDisable8dot3NameCreation` is set to 1 in the registry key `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\File System`).
		Syntax
		`VIRTACREATE Appliance /E`
		`VIRTACREATE Appliance /C <path_to_appliance_to_clone>`
		`VIRTACREATE Appliance /N <path_to_template>`
		`VIRTACREATE Appliance /T <path_to_template> [<server|server username password>]`
		Options
		Option / Description
		Appliance — Full path of the container to create or update. The path cannot contain spaces.
		/E — Create a container with no file set (contains only VirtaMove proprietary files and properties).
		/C — Clone a container.
		/N — Create a container from a container template.
		/T — Create a container from a container template using tether. Credentials can be provided. If VirtaMove Source Agent is installed on the source machine, you do not need to provide credentials for the source machine.
		(https://virtamove.atlassian.net/wiki/spaces/VDOC/pages/314212506/virtacreate)

Claim	US 8,943,500 Claim Term	Analysis
14pre	A method, comprising:	To the extent that the preamble is limiting, the Accused Products comprise "[a] method" for updating isolated environments (containers) as applications request new resources. *See* limitation 1pre.
14a	creating one or more isolated environments during installation of the one or more applications; and	*See* limitation 1d.
14b	updating the one or more isolated environments as the one or more applications use additional resources while running;	*See* limitation 1e.
14c	removing the one or more isolated environments as part of uninstalling the one or more applications; and	*See* limitation 1f.
14d	storing the one or more isolated environments for retrieval at a later time after the one or more applications are uninstalled.	*See* limitation 1g.
15	The method of claim 14 comprising intercepting access to system	The Accused Products comprise a method as claimed in claim 14. *See* claim 14.

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	resources and interfaces at one or more interception layers.	The Accused Products meet the remaining limitations in this claim. *See* claim 3.
16	The method of claim 15 comprising maintaining mapping between the system resources inside the one or more isolated environments and outside.	The Accused Products comprise a method as claimed in claim 15. *See* claim 15. The Accused Products meet the remaining limitations in this claim. *See* claim 5.
17	The method of claim 14 comprising isolating the one or more applications from other applications and a host operating system while running within the one or more isolated environments.	The Accused Products comprise a method as claimed in claim 14. *See* claim 14. The Accused Products meet the remaining limitations in this claim. *See* claim 2.
18pre	A non-transitory computer readable storage medium comprising instructions for:	The Accused Products comprise a "non-transitory computer readable medium" for updating isolated environments (containers) as applications request new resources. *See* limitation 1pre.
18a	creating one or more isolated environments during installation of one or more applications; and	*See* limitation 1d.

Claim	US 8,943,500 Claim Term	Analysis
18b	updating the one or more isolated environments as the one or more applications use additional resources while running;	*See* limitation 1e.
18c	removing the one or more isolated environments as part of uninstalling the one or more applications; and	*See* limitation 1f.
18d	storing the one or more isolated environments for retrieval at a later time after the one or more applications are uninstalled.	*See* limitation 1g.
19	The non-transitory computer readable storage medium of claim 18 comprising instructions for maintaining mapping between the system resources inside the one or more isolated environments and outside.	The Accused Products comprise a non-transitory computer readable medium as claimed in claim 18. *See* claim 18. The Accused Products meet the remaining limitations in this claim. *See* claim 5.

Claim	US 8,943,500 Claim Term	Analysis
20	The non-transitory computer readable storage medium of claim 19 comprising instructions for isolating the one or more applications from other applications and a host operating system while running within the one or more isolated environments.	The Accused Products comprise a non-transitory computer readable medium as claimed in claim 19. *See* claim 19. The Accused Products meet the remaining limitations in this claim. *See* claim 2.